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ABSTRACT

This directory identifies some of the schools, colleges, and universities that successfully use computers for learning and teaching in the United States. It was compiled to help teachers, administrators, computer center workers, and other educators exchange information, ideas, programs, and courses. Individuals listed as contacts are willing to share their knowledge with others. Ninety-four elementary and secondary schools, 71 public school districts, 37 community colleges, 158 private and public colleges and universities, and seven public access institutions are listed. Entries are arranged geographically by state for each type of institution, and include information on reasons for inclusion, enrollment, users, illustrative applications, computers, terminals, public information, and contact. A list of exemplary institutions in academic computing is attached. (Author/KP)

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ACADEMIC COMPUTING DIRECTORY

A SEARCH FOR EXEMPLARY INSTITUTIONS USING COMPUTERS FOR LEARNING AND TEACHING

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FIRST EDITION

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All the individuals listed as "contacts" in this Directory generously contributed their knowledge and time, in order to help prepare the Directory entries.

The following individuals from HumRRO's Eastern Division participated in gathering information, preparing Directory entries, editing, proofreading, and the other activities necessary to preparing this Directory:

Robert J. Seidel, Ph.D.	Marilyn Knetsch
Beverly C. Hunter	Stephen Pierce
Carol Hargan	Dana Krochmal
Alice Thompson	David Goldhaber

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INTRODUCTION

This Directory identifies some of the schools, colleges, and universities that successfully use computers for learning and teaching in the United States. The purpose of the Directory is to help teachers, administrators, computer center people, and other educators to exchange information, ideas, programs and courses.

All of the people listed as "contacts" in this directory have generously agreed to share their knowledge and experience with others who need to learn. In this way, the Directory encourages growth of the informal network of educators who are helping each other to learn and to teach, with the computer and about the computer.

Students and teachers at these schools and colleges are using computers in many different ways in the learning/teaching process. A few examples include data processing training, remedial reading and mathematics drills, physics and chemistry laboratory simulations, computer-generated art and music, social science data bases and statistical analysis, engineering computations, engineering design aids, and business games. Many students in all fields of study are becoming computer literate citizens.

Achieving the benefits of academic computing at acceptable cost levels requires a great deal of knowledge and experience in organization, staffing, faculty training, curriculum, hardware, software, budgeting, and politics. One of the shortcuts to acquiring such expertise is by learning from those who have been there.

Institutions Included and Excluded

The Directory identifies 94 elementary and secondary schools, 71 public school districts, 37 community colleges, 158 private and public colleges and universities, and 7 institutions we call "public access." Public Access institutions provide instructional computing through museums or community and vocational centers. The Directory does *not* list professional schools, military schools or industry training programs. The Directory does not list computer service organizations, such as timesharing companies or educational networks. The Directory does not list projects such as curriculum development centers.

The Search

Many eligible institutions are not listed in this edition of the Directory. The reader can participate in the search for institutions. Fill out the nomination form in the back of this book and send it to HumRRO. Current plans call for updating the Directory next year. The institutions you nominate will be contacted and, if they agree, will be included in the next edition of this Directory. Please do not hesitate to nominate your own institution! To find the 370 institutions listed in this Directory, we conducted a mail survey in excess of 7,000 educators and technologists from all States and Puerto Rico. We mailed a package of information and nomination forms to 3,500 persons on the mailing lists of the Association for Development of Computer-Based Instructional Systems (ADCIS), and the Association for Educational Data Systems (AEDS). About 3,500 other packages were mailed to members of the Association for Computing Machinery Special Interest Group on Computer Uses in Education (SigCUE), Directors of college and university academic computing centers, Chairpersons of computer science

and data processing departments, and principals of high schools identified in an earlier study.[1] Announcements were published in *NEA NOW*, *THE Journal* (Technological Horizons in Education), and *Educational Technology* Magazine.

About 600 persons responded to our inquiry. These persons were from the computer industry, computer center personnel, administrators of educational institutions, faculty, and educational consultants. A hundred or so nominations were for organizations such as networks, computer service companies, or curriculum projects. For example, we received ten nominations for TIES network in Minnesota. In these cases, we called the organizations nominated and asked them in turn to nominate specific schools or colleges that use their network. Self-nominations were encouraged. The majority of the nominations were from people who knew the school by reputation or personal contact.

Directory Information

We telephoned at least one person at each nominated institution to ascertain the appropriate contact to list in the Directory. The person listed as the contact generally has the broadest purview of academic computing at his/her institution. In a telephone interview with this person, we gathered the items of information found in this Directory. We then sent a proof copy of the directory entry to each institution contact, requesting verification of the information.

Reasons for Nomination

A unique feature to the Directory is that we asked the nominators to identify reasons why educators at other similar institutions might want to know about the nominated institution. Hundreds of different reasons were given. They fall into several broad categories as follows:

	Category	The institution has
I	Student Accomplishments	. . . documented evidence of student's accomplishments.
II	Institution Productivity	. . . documented evidence of increases in productivity of the institution.
III	Spectrum of Applications	. . . wide variety of computer applications in a spectrum of subject areas and courses.
IV	Computing Literacy	. . . program, goal, or course of study aimed at providing knowledge, skills, values, attitudes toward computers and their uses and impact.
V	Computer Science and/or Data Processing Curricula	. . . an outstanding program of studies in computer science or data processing.
VI	Outreach	. . . computing has had impact on people, institutions, and state-of-the-art outside the organization.

These "reasons for nomination" are listed as the first item under each institution's Directory entry. These "reasons" may help you to identify institutions that have solved problems similar to your own.

[1] Bukoski, W.J., & Korotkin, A.L. *Computing Activities in Secondary Education.* Washington, DC: American Institutes for Research, September 1975.

DEFINITION OF DIRECTORY ENTRY ITEMS

Reasons for Nomination

Reasons given by the nominator and/or the contact person, as to why this institution would be a useful exemplar of academic computing. Why it would be of interest to other similar institutions.

Enrollment

Number of students enrolled in this institution in the 1975-76 or 1976-77 academic year. Full-time, total, or FTE figures are given.

Annual Users

Approximate number of STUDENTS from this institution who used the computer for instructional or guidance purposes in the 1975-76 or 1976-77 academic year.

Other Users

Type of individuals or institutions outside of this institution who use the computer facilities for academic purposes.

Illustrative Applications

Examples of the type of instructional or guidance computer use in various disciplines. Grade level of students if appropriate.

Computer(s)

Manufacturer and model number of computer(s) used for instruction and/or guidance. Name of network or consortium if computing services are obtained outside the institution.

Terminals

Number of interactive terminals available for STUDENT use on campus; graphics or plotter terminals; remote batch terminals available for student use on campus.

Public Information

Name of any newsletter, brochure, or other publicly available literature on the subject of this institution's academic computing.

Contact(s)

Name, title, organization, address and phone number of the individual(s) to be contacted by individuals from other schools who are seeking information. This individual should be familiar with most user faculty and applications, if possible.

COLLEGES/UNIVERSITIES

Auburn University

Reasons for Nomination: Broad use of computer in curriculum; provides computing support to neighboring schools and colleges.

Enrollment: 18,000 FTE **Annual Users:** 7,500

Other Users: Tuskegee Institute; Auburn University at Montgomery

Illustrative Applications:
Basic computer courses for all students in BUSINESS and ENGINEERING.
Simulation projects for advanced students.
No-charge time-sharing available for all students.
Bibliographic searches for school of EDUCATION.

Computer(s): HP 2000; IBM 370/150

Terminals: 75 interactive; 6 remote batch

Public Information: Monthly newsletter, AU Computer Center

Contact(s):
Ben B. Barnes, Director
Computer Center
Auburn University
Parker Hall
Auburn, AL 36830
(205) 826-4285

University of Arizona

Reasons for Nomination: Educational computing continually expanded over 4 years; costs for instructional computing a budget line-item.

Enrollment: 30,000 Total **Annual Users:** 10,000

Illustrative Applications: CAI in wide spectrum of disciplines and modes.

Computer(s): DEC PDP 10; Cyber 175; access to Univ. of Ill. PLATO System

Terminals: 250 interactive; 6 remote batch

Contact(s):
David L. Clark, Director
Computer Center
University of Arizona
Tuscon, AZ 85721
(602) 884-2915

California Polytechnic State University San Luis Obispo

Reasons for Nomination: Bachelors and masters degree programs in Computer Science as professional career; pioneers in designing and implementing low-cost minicomputer CAI systems.

Enrollment: 14,000 FTE **Annual Users:** 6,000

Illustrative Applications:
Student-developed programs in microprocessor laboratory.
Microprocessor configuration includes floppy disks, RAM, and color graphics terminal.
Student-built operating system in minicomputer laboratory.
Standard programming languages taught on low-cost minicomputer CAI system.

Computer(s): DEC PDP 11/45; IBM 360/50; DEC PDP 11/35; remote connection to CDC Cyber 174; minicomputers and microprocessors in engineering laboratory

Terminals: 35 interactive

Contact(s):
Daniel Stubbs, Chairman
Computer Science & Statistics Dept.
California Polytechnic State University
San Luis Obispo, CA 93407
(805) 546-2824

California State University, Fresno

Reasons for Nomination: A resource site for CAI within California supported by local funding.

Enrollment: 15,000 Total **Annual Users:** 7,500
12,500 FTE

Illustrative Applications:
Tutorials and simulations in CALCULUS.
Student-authored simulations in CHEMISTRY.

Computer(s): DEC PDP 11/45; State University Data Centers; CDC Cyber 173; State University Data Centers; CDC 3300-3170

Terminals: 35-40

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Public Information: ABC's of CAI (contains a list of resource people) Courseware Catalog PDP 11/45

Contact(s): Jack A. Chambers, Director
Center for Information Processing
California State University, Fresno
Maple & Shaw Avenue
Fresno, CA 93740
(209) 487-1123

California State University, Fullerton

Reasons for Nomination: Academic computing since 1969. President believes in offering different teaching options.

Enrollment: 22,000 Total **Annual Users:** 3,000
14,800 FTE

Illustrative Applications: Remedial programs in basic skills in ALGEBRA and ENGLISH.
Management games used as a full-year activity in graduate level MANAGEMENT SCIENCE program.

Computer(s): CDC 3150; DEC PDP 11/45; DEC PDP 11/40; access to California State University Network

Terminals: 50 interactive; 1 remote batch

Contact(s): Gene Dippel, Director of Computer Center
California State University-Fullerton
Fullerton, CA 92632
(714) 870-1234

California State University, Northridge

Reasons for Nomination: Extensive computer facilities and computer-integrated curricula; spectrum of applications.

Enrollment: 16,000 Total **Annual Users:** 4,000

Other Users: 18 other California State University campuses.

Illustrative Applications: Mandatory freshman ENGLISH grammar courses.
Science tutorials in CHEMISTRY and PHYSICS.
BUSINESS simulations for world trade and crisis management.

Computer(s): DEC PDP 11/45; CDC Cyber 173; CDC 3170

Terminals: 66 interactive

Public Information: "How-to" brochures
Computer Center Newsletter

Contact(s): J.A. Hayes, Academic Coordinator
Stephen Stepanek
California State University at Northridge
Computer Center
18111 Nordhoff Street
Northridge, CA 91330
(213) 885-2787

The Claremont Colleges

Reasons for Nomination: Academic computing in all disciplines; outreach to other institutions; integration of academic computing in science, engineering, and social science.

Enrollment: 5,000 **Annual Users:** 1,500

Other Users: Seaver Computer Center Network; 3 colleges, 2 universities, and 1 high school.

Illustrative Applications: Statistical analysis in SCIENCE.
Statistical analysis and data bases in SOCIAL SCIENCES and HUMANITIES.
Computation in MATHEMATICS.
Simulation and games in BUSINESS.
Tutorials in LANGUAGE ARTS.

Computer(s): DEC PDP 10; IBM 360/40; UNIVAC 1900 Code System

Terminals: 57 interactive

Public Information: Brochure describing Seaver Computer Center Services

Contact(s): Jon Mosser, Assist. Director, Services
Seaver Computer Center
The Claremont Colleges
Claremont, CA 91711
(714) 628-8511, Ext. 3230

Grossmont College

Reasons for Nomination: Usage by 15 departments; computer considered to be as essential a learning tool as the library.

Enrollment: 16,000 Total **Annual Users:** 800
10,000 FTE

Illustrative Applications: Vocational training of programmers and operators for a 2-year certificate in ADP.
Huntington simulations in freshmen SCIENCE courses.

Computer(s): DEC PDP 10

Terminals: 60 interactive

Contact(s): David Lunsford
Coordinator, Instructional Computing
Mathematics Department
Grossmont College
El Cajon, CA 92020
(714) 465-1700

Los Angeles Pierce College

Reasons for Nomination: Industry recognition of competence of computer science and technology graduates.

Enrollment: 15,000 FTE **Annual Users:** 1-2,000

Illustrative Applications: Training hardware field service engineers in TECHNOLOGY.
DATA PROCESSING curriculum training programmers.

Computer(s): DEC PDP 11; IBM 1620; District's IBM 370/165

Terminals: 24 interactive; 1 remote batch

Contact(s): Ed Hoffmann, Chairman
Computer Sciences
Los Angeles Pierce College
6201 Winnetka Ave.
Woodland Hills, CA 91371
(213) 347-0551

Mt. San Antonio College

Reasons for Nomination: Data Processing Program successful in placement of graduates; hands-on environment for computer science courses; development of curricular materials.

Enrollment: 20,000 Total **Annual Users:** 2,000

Illustrative Applications: Courses in DATA PROCESSING and COMPUTER TECHNOLOGY.
Student work/study programs.
Computer network logic simulator in ELECTRONICS.
Test grading and student course evaluations in all subjects.

Computer(s): Xerox 530; IBM 1130; Altair 8080; IBM 370/135.

Terminals: 2 interactive

Public Information: Textbook: Gore, M. and Stube, J: "Elements of Systems Analysis for Business Data Processing," Wm. C. Brown Co.

Contact(s): Marvin Gore, Chairman
Computer Services Department
Mt. San Antonio College
1100 N. Grand Ave.
Walnut, CA 91789
(714) 598-2811

Northrop University

Reasons for Nomination: Well-established computer science program for over 15 years; approximately 70% student utilization of computer during school year; 50% of courses use computing.

Enrollment: 2,000 Total **Annual Users:** 1,500

Illustrative Applications: Business-oriented COMPUTER SCIENCE program.
Electronic Circuit Analysis Program (ECAP) used in MATHEMATICS.
Programs to study the behavior of differential equations in CALCULUS.
Extensive graphics use.

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Computer(s): General Automation 1830

Terminals: 1 interactive

Contact(s): Oliver Ratliff, Chairman
Computer Science Department
Northrop University
1155 W. Arbor Vitae Street
Inglewood, CA 90306
(213) 614-3470

Stanford University

Reasons for Nomination: Low Overhead Time-Sharing System (LOTS); easy student access to computers; sophisticated CAI (IMSSS); academic computing since 1958. SPIRES information retrieval system (SCIP); BALLOTS Library Automation System.

Enrollment: 11,000 Total **Annual Users:** 2,700

Illustrative Applications: Student research.
Comprehensive COMPUTER SCIENCE curriculum.
Major use of statistical packages in EDUCATION and SOCIAL SCIENCE.
CAI programs in PHILOSOPHY, FOREIGN LANGUAGES, and MUSIC THEORY.

Computer(s): DEC 2050; DECsystem 2050; DEC 10; DECsystem-10; IBM 370/168; IBM 360/95. Also - Sigma 5 and numerous minicomputers throughout campus.

Terminals: 705

Public Information: SCIP newsletter. Information available from all facilities.

Contact(s): Ralph E. Gorin, Manager
LOTS Computer Facility
Patrick Suppes, Director
Institute for Mathematical Studies in the Social Sciences
Charles R. Dickens, Director
Stanford Center for Information Proc.
Wolfgang K.H. Panofsky, Director
Stanford Linear Accelerator Center
Stanford University
Stanford, CA 94305
(415) 497-3214 (Gorin)
(415) 497-3113 (Suppes)

University of California, Berkeley

Reasons for Nomination: 1976 initiation of large interactive minicomputer system; diverse computer services; large number of student users.

Enrollment: 30,000 Total **Annual Users:** 15,000

Illustrative Applications: Drill and practice in introductory PROGRAMMING.
Simulations in SOCIAL SCIENCE.
Problem-solving in PHYSICS and CHEMISTRY.

Computer(s): CDC 6400; (4) DEC PDP 11/70

Terminals: 200 interactive

Contact(s): M. Stuart Lynn, Director
Office of Computing Affairs
University of California at Berkeley
209 Evans Hall
Berkeley, CA 94720
(517) 642-4083

University of California, Irvine

Reasons for Nomination: Physics Computer Development Project; computer in mainstream in several departments; long history of NSF support.

Enrollment: 10,000 Total **Annual Users:** 5,400

Other Users: Four University of California campuses

Illustrative Applications: On-line testing in MATHEMATICS, PHYSICS, and ANTHROPOLOGY.
Graphics tutorials in PHYSICS.
Tutorials on oxidation and reduction using graphics in CHEMISTRY.
Sophisticated game management in ECOLOGY.

Computer(s): Honeywell Sigma 7; DECsystem-10; DEC PDP 11/45

Terminals: 200 interactive; approximately 40 graphic terminals

Public Information: Computer Center Newsletter, numerous articles

Contact(s): Alfred Bork, Director, PCDP
Department of Physics
University of California
Irvine, CA 92717
(714) 833-6911

University of California, San Diego

Reasons for Nomination: Balanced program of computing support for instruction, research, and administration; computer use for scheduled classes; independent study program for computer literacy for all students.

Enrollment: 10,000 Total **Annual Users:** 4,000
8,000 FTE

Illustrative Applications: Applied Physics and Information Sciences (APIS) departments use both the central computer and PDP LSI 11&10 microcomputer.
Simulated cruise in OCEANOGRAPHY using world ocean data base.

Computer(s): Burroughs 6700; CDC 3600

Terminals: 54 interactive; 7 remote batch

Contact(s): Edward Coughran
Director, Computer Center
University of California, San Diego
C-010
LaJolla, CA 92093
(714) 452-4050

Colorado School of Mines

Reasons for Nomination: Extensive program with limited personnel and budget for a school this size; academic computing integrated into all disciplines in many modes; introductory computer science required of all students; outreach to high schools and small colleges.

Enrollment: 2,700 Total **Annual Users:** 2,160

Other Users: 3,650 from 5 high schools and 9 small colleges and community colleges.

Illustrative Applications: Programming and modeling in COMPUTER SCIENCE.
Drills simulations, data analysis, testing, and graphics in all ENGINEERING courses.

Computer(s): DECsystem-10; 7 minicomputers; 15 microcomputers

Terminals: 75 interactive

Public Information: Monthly newsletter and User's Guide

Contact(s): Paul Treece, Manager
Systems and Operations Computer Ctr.
Colorado School of Mines
Golden, CO 80401
(303) 279-0300, Ext. 435

University of Colorado, Boulder

Reasons for Nomination: Academic computer center has graphics facilities and a staff to serve instructional departments; minicomputers with specialized capabilities are used in varied instructional applications.

Enrollment: 20,000 Total

Illustrative Applications: ELECTRICAL ENGINEERING laboratory teaches students about process control and software development.
Formal courses in real-time process control in EXPERIMENTAL PSYCHOLOGY for undergraduate and graduate students.

Computer(s): CDC 6400; CDC 1700; 100 minicomputers

Public Information: DIGIT (Computer Center Newsletter)

Contact(s): Bertram Herzog, Director
Computing Center
University of Colorado, Boulder
3645 Marine Street
Boulder, CO 80302
(303) 492-6501

Fairfield University

Reasons for Nomination: Administrative and faculty support; since 1966, development of graduate level CAI curriculum; 70% of undergraduates learn APL; integration of computer use with calculus and statistics instruction.

Enrollment: 4,900 Total **Annual Users:** 1,500
3,436 FTE

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Other Users: Remote APL terminals in high schools

Illustrative Applications: Computer literacy curriculum including CAI course in APL; introductory CAI course on computers.
Library of small CAI units in CALCULUS used in conjunction with classroom work.
Research methods course in STATISTICS.
Freshman remediation in MATHEMATICS.
Simulations in BIOLOGY, CHEMISTRY and PHYSICS.

Computer(s): Configuration combines IBM, DEC, Digital Scientific Corp. equipment

Terminals: 25 interactive

Contact(s): John J. Schurdak, Director
Educational Research & Development
Fairfield University
Fairfield, CT 06430
(203) 255-5411

Trinity College

Reasons for Nomination: Policy of buying time on outside computer resources; student-designed simulations and data analysis in community research.

Enrollment: 1,600 Total **Annual Users:** 450

Illustrative Applications: Student programming in COMPUTER SCIENCE.
Drills in STATISTICS and PSYCHOLOGY.
Simulations in PSYCHOLOGY.
Data analysis in PSYCHOLOGY, ECONOMICS and SOCIOLOGY.

Computer(s): DEC PDP 11/34; access to Dartmouth and Yale Universities

Terminals: 15 interactive

Contact(s): August E. Sapega
Trinity College
Hartford, CT 06106
(203) 527-3151

University of Hartford

Reasons for Nomination: All students exposed to programming.

Enrollment: 6,000 Total

Illustrative Applications: Programming in introductory CALCULUS.
Two-year certificate program in COMPUTER SCIENCE in Department of Engineering.

Computer(s): Data General Eclipse 5/200

Contact(s): Fred Striefler
Asst. Prof. of Physics & Computer Science
University of Hartford
200 Bloomfield Avenue
West Hartford, CT 06117
(203) 243-4318

Yale University

Reasons for Nomination: Method of teaching computer science; emphasis on APL programming; advanced CRT-based terminal system.

Enrollment: 10,000 Total **Annual Users:** 1,000

Illustrative Applications: Beginners as well as computer science majors use APL for problem-solving in wide range of disciplines.

Computer(s): DEC PDP 10; DEC PDP 11

Terminals: 40 interactive

Public Information: Handbook of The Department of Computer Science

Contact(s): Alan Perlis, Chairman
Computer Science Department
Yale University
New Haven, CT 86520
(203) 436-8160

Gallaudet College

Reasons for Nomination: Educates deaf and hearing-impaired students, kindergarten through college, from all over the world; centralized computer facility for administration, research, and academic computing.

Enrollment: 1,200 Full Time **Annual Users:** 380

Illustrative Applications:
Drills in MATHEMATICS and LANGUAGE ARTS, grades 2-8.
Tutorials in SCIENCE, grades 9-12.
Drills in LANGUAGE ARTS at college level.
Statistical studies using SPSS for college and graduate SOCIOLOGISTS.

Computer(s): DEC PDP 10

Terminals: 70 interactive plus plotter

Public Information: Computer Center brochure
Monthly newsletter

Contact(s): Kevin Casey, Director
Computer Center
Gallaudet College
7th and Florida Ave., N.E.
Washington, DC 20002
(202) 447-0519

Howard University

Reasons for Nomination: Accessibility of computer to students; expanding CAI program.

Enrollment: 10,000 Total **Annual Users:** 2,000

Illustrative Applications:
Tutorials in ENGLISH.
Drill and practice in MATHEMATICS.
Problem-solving in ARCHITECTURE and ENGINEERING.
Research involving black church leaders in RELIGION.

Computer(s): IBM 370/158; IBM System 7; IBM System 3; Data General Nova 880

Terminals: 112 interactive; 6 remote batch

Contact(s): George Martin, Director
Computer Center
Howard University
2400 6th Street
Washington, DC 20059
(202) 636-7200

University of D.C., Van Ness Campus

Reasons for Nomination: Data Processing curriculum; development of curricular materials; benefit to lower income urban population.

Enrollment: 4,000 Total **Annual Users:** 2,188
2,770 FTE

Other Users: Data processing training for high school students.

Illustrative Applications:
Simulation and SPSS in SOCIAL SCIENCES.
Tutorials in MATHEMATICS, BUSINESS, BIOLOGY, PHYSICS.
Student programming in DATA PROCESSING.

Computer(s): IBM 370/145

Terminals: 22 interactive; 1 remote batch

Public Information: Brochure: "Computer Center achievements at the Mount Vernon and Van Ness Campuses," (IBM) GK 20-0825-0 (3/75)

Contact(s): Jesse J. Mayes, Director
Computer Center
University of D.C. (Van Ness Campus)
4545 Connecticut Avenue
Washington, DC 20008
(202) 282-7344

University of Delaware

Reasons for Nomination: Academic computing since 1965; organizational structure includes instructional services and research in lieu of traditional combined services; operates multi-computer network.

Enrollment: 15,000 Total **Annual Users:** 6,000

Other Users: Delaware Technical & Community College; Delaware State College; Cecil County Community College

Illustrative Applications:
CAI systems in use of computing facilities.
Drill and practice systems in LANGUAGES.
MUSIC ear-training.
Computer-assisted testing.
Problem-solving in ENGINEERING, BUSINESS, and SCIENCES.

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Computer(s): Burroughs B7700; DEC PDP 10; HP 2000; DEC PDP 11/70

Terminals: 200 interactive; 10 remote batch

Public Information: Pamphlet summarizing system, Program Library, Bi-monthly Newsletter

Contact(s): John Falcone, Director
Computer Center
University of Delaware
Newark, DE 19711
(302) 453-6065

Florida Atlantic University

Reasons for Nomination: Bachelor's degree in Computer Systems; upper division and graduate levels only; concentration on business and management.

Enrollment: 7,000 Total **Annual Users:** 3,500

Illustrative Applications: Computation and numerical analysis in MATHEMATICS and ENGINEERING. Problem analysis in BUSINESS.

Computer(s): UNIVAC 1108; access to Southeast Regional Data Center (SERDC) Network.

Terminals: 25 interactive

Public Information: Pamphlet summarizing program

Contact(s): Neal S. Coulter
Director, Computer Systems Program
Florida Atlantic University
Boca Raton, FL 33431
(305) 395-5100

Florida State University

Reasons for Nomination: Over 15 years' experience in instructional computing in all phases from research to implementation; many applications in continuing use; developed many CAI programs; documented research on many aspects of instructional computing; a PLATO installation.

Enrollment: 22,000 FTE **Annual Users:** 5,000

Other Users: Florida A&M, Univ. of Florida, Florida Junior College, Central Florida Community College, West Palm Beach Community College, Sarasota High School, Leon County High Schools.

Illustrative Applications: CAI used in many disciplines; large on-line testing system.

Computer(s): CDC Cyber 73; CDC Cyber 74 (PLATO)

Terminals: 250 interactive; 8 remote batch; extensive graphics facilities.

Public Information: Computing Center Newsletter "Output"

Contact(s): Jesse Poore, Director, Computing Center
Roger Kaufman, Acting Director
Center for Educ. Development & Eval.
Florida State University
Computing Center
110 Love Building
Tallahassee, FL 32306
(904) 644-2764

Emory University

Reasons for Nomination: Spectrum of applications; development of graphics curricular materials.

Enrollment: 7,200 Total **Annual Users:** 1,300

Illustrative Applications: Multimedia course in gross ANATOMY. Simulations in PHYSICS and BIOLOGY. Statistical applications in SOCIOLOGY. Graphics in CALCULUS.

Computer(s): UNIVAC 90/80

Terminals: 99 interactive; 1 remote printer

Public Information: PUBLIC PAGES (newsletter)

Contact(s): Peter Day, Coordinator for Systems, Operations & User Services
Emory University
Uppergate House
Atlanta, GA 30322
(404) 329-7655

North Georgia College

Reasons for Nomination: Uses time-sharing computer services via teletypes.

Enrollment: 1,400 Total **Annual Users:** 200

Illustrative Applications: Introductory COMPUTER PROGRAMMING.
BUSINESS data processing.
Computation and numerical analysis in MATHEMATICS.
Calculations and simulations in STATISTICS.

Computer(s): DEC PDP 8; Scidata; access to Univ. of Georgia's CDC Cyber 74

Terminals: 6 interactive; 1 remote batch

Contact(s): Ernest Elder, Assistant Professor of Mathematics
North Georgia College
Dahlonega, GA 30533
(404) 864-3391

DePaul University

Reasons for Nomination: Degree program in Computer Science; efficient use of resources; developed SPSSHP software package in social science and business used by several institutions; Department of Academic Computing Services has its own budget; rapport between users and Academic Computing Services.

Enrollment: 10,000 - 12,000 Full Time **Annual Users:** 1,000 to 2,000

Illustrative Applications: Degree program in COMPUTER SCIENCE offered by MATHEMATICS Department.
Statistical analysis in SOCIAL SCIENCES, sophomores through graduate.
Drills in SOCIAL SCIENCES, sophomores and juniors.
Simulations and games in MARKETING and ECONOMICS, juniors through graduate.

Computer(s): HP 2000F; IBM 370/138; microprocessor systems

Terminals: 30 interactive; 1 remote batch

Public Information: Descriptive brochure for Computer Science program

Contact(s): Jerry Goldman, Chairman
User Committee on Academic Computer Services
DePaul University
2323 N. Seminary
Chicago, IL 60614
(312) 321-8250

Eastern Illinois University

Reasons for Nomination: Extensive student use with modest computing budget.

Enrollment: 9,300 Total **Annual Users:** 2,000

Other Users: Serves local school districts

Illustrative Applications: Plotting topographical maps in GEOGRAPHY.
Self-instruction in programming languages.
Research design and hypothesis testing in PSYCHOLOGY.

Computer(s): Data General Eclipse 230; IBM 360/50; member of Mid-Illinois Computer Consortium; access to Univ. of Illinois's PLATO network

Terminals: 15 interactive; 1 remote batch

Contact(s): Roland Spaniol, Director
Computer Services
Eastern Illinois University
Student Services Building
Charleston, IL 61920
(217) 581-3227

Illinois State University

Reasons for Nomination: Studies on performance and cost-effectiveness of academic computing; CAI part of teacher-preparation program; fully integrated program in economics.

Enrollment: 20,000 FTE **Annual Users:** 2,000

Other Users: Bradley University, Illinois Western Univ., 200 people.

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Illustrative Applications: 30-program tutorial review in introductory ECONOMICS.
Census data for student research in SOCIAL SCIENCES.
SPSS used in POLITICAL SCIENCE and MARKETING.

Computer(s): IBM 370/145; Mid Illinois Computer Cooperative (MICC)'s CDC Cyber 72

Terminals: 20 interactive; 2 remote batch

Contact(s): Tse-Kia Kup Tcheng, Director of Academic Computing Services
Illinois State University
Normal, IL 61761
(309) 438-3611

University of Illinois, Chicago Circle

Reasons for Nomination: Development of computer graphics applications; remote PLATO site; evaluative data available on German language lab.

Enrollment: 20,000 FTE **Annual Users:** 3,000

Illustrative Applications: Tutorials and problem-solving in ENGINEERING.
Language lab in GERMAN with unique teaching approaches.
Interactive program for problem-solving in PHYSICAL SCIENCE.
Simulations in BIOLOGY.

Computer(s): Urbana campus's PLATO system

Terminals: 18 interactive

Contact(s): David Miller, Director
Tom DiFanti, Assistant Professor
Instructional Resource Development
Univ. of Illinois at Chicago Circle
P.O. Box 4348, Rm. 1325, Bldg. SED
Chicago, IL 60680
(312) 996-4621

University of Illinois, Urbana

Reasons for Nomination: Developed PLATO system; oldest operational CAI curriculum; wide range of application; extensive development of CAI materials.

Enrollment: 33,000 Total **Annual Users:** 10,000

Other Users: High schools, universities, law schools, community colleges.

Illustrative Applications: Lessons in MUSIC theory and technique.
Simulations in CHEMISTRY and LAW.
Library search.
Simulations and bloood bank management in BIOLOGY.
Problem-solving in PHYSICS and ENGINEERING.
Sentence structure analysis in ENGLISH.

Computer(s): 2 CDC Cyber 73; CDC Cyber 175; CDC 6500 (PLATO)

Terminals: 400 PLATO, 100 TTY interactive

Public Information: "PLATO" and numerous brochures.

Contact(s): Donald Bitzer, Director
Computer-Based Education Research Lab
University of Illinois at Urbana
Urbana, IL 61801
(217) 333-6210

Lewis University

Reasons for Nomination: Small school with substantial, accessible computer power; outreach to community.

Enrollment: 3,400 Total **Annual Users:** 300

Other Users: Eight high schools, one university and one junior college.

Illustrative Applications: Programming in COMPUTER SCIENCE.
Systems management, timesharing, and hardware maintenance in BUSINESS DATA PROCESSING.
Statistical analysis in MATHEMATICS.
Data analysis in BUSINESS.

Computer(s): Honeywell 1642

Terminals: 10 interactive

Public Information: Brochure describing computer science program

Contact(s): Walter Szalajka, Chairman
Dept. of Math and Computer Science
Lewis University
Box 1111
Lockport, IL 60441
(815) 838-0500, Ext. 391

Anderson College

Reasons for Nomination: Interdepartmental approach to academic computing; computer science program; facilities open to all students.

Enrollment: 1,900 FTE **Annual Users:** 750

Other Users: One high school; two commercial enterprises.

Illustrative Applications: Programming, simulations, numerical analysis, and data base maintenance in COMPUTER SCIENCE, MATHEMATICS, and COMPUTER SCIENCE-BUSINESS.
Simulations in MATHEMATICS and BUSINESS.
Computation in MATHEMATICS.

Computer(s): HP 3000

Terminals: 34 interactive

Public Information: Brochure describing computer science program

Contact(s): Tom Harbron, Director Computer Ctr.
Anderson College
Anderson, IN 46011
(317) 644-0951, Ext. 331

Indiana-Purdue University, Ft. Wayne

Reasons for Nomination: First institution in the state to utilize PLATO Portable (non-PLATO) terminals used widely by faculty at home.

Enrollment: 5,500 Total **Annual Users:** 600-800

Illustrative Applications: Students in BUSINESS and ECONOMICS required to utilize data base of financial information through interrogation to assist in making decisions in a gaming environment. Students explore alternatives and future projections; e.g., by using an interactive program that forecasts sales and other business indications.
Computation in ENGINEERING produces plotted output, for students at lower division.

Computer(s): IBM 370/115; access to Indiana University Computing Network's DEC PDP/10, CDC Cyber 172, and CDC 6600

Terminals: 23 interactive including 3 PLATO terminals

Contact(s): Gordon Wakefield, Academic Computing Coordinator-Computer Center
Indiana-Purdue University at Ft. Wayne
2101 E. Coliseum Blvd.
Ft. Wayne, IN 46805
(219) 482-5816

Purdue University, Calumet Campus

Reasons for Nomination: Good statistics on graduate placement in computer science; since 1961 pioneered in 2-year and 4-year computer science programs used as model for other institutions; academic computing integrated into many subjects.

Illustrative Applications: Commercial DATA PROCESSING.
ELECTRONIC ENGINEERING.

Computer(s): Nova 800; Interdata 80; access to Lafayette Campus' CDC 6500; IBM 370/138; Prime 300

Terminals: 18 interactive

Contact(s): Walter Miner, Director
Data Systems and Services
A.J. Adams, Head
Information Systems and Computer Programming Department
Purdue University, Calumet Campus
Hammond, IN 46323
(219) 844-0520, Ext. 356 (Mr. Miner)
(219) 844-0520, Ext. 439 (Mr. Adams)

Saint Mary's College

Reasons for Nomination: Emphasis on theory and practical use of computers; computing experience required for business department graduation.

Enrollment: 1,600 Total **Annual Users:** 300

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Illustrative Applications: Programming, drills, gaming, and data bases in COMPUTER SCIENCE.
On-line testing in RELIGIOUS STUDIES.
Drills, lab analysis, and graphics in CHEMISTRY and BIOLOGY.

Computer(s): Honeywell 435; Datanet 30

Terminals: 13 interactive

Contact(s): James Mead, Director
Academic Computer Services
Saint Mary's College
Lemans Hall
Notre Dame, IN 46556
(219) 284-4271

University of Evansville

Reasons for Nomination: Academic computing supported from general budget; CAI center in library; facilities available 7 days a week.

Enrollment: 5,800 Total **Annual Users:** 700
4,500 FTE

Illustrative Applications: Computerized Vocational Information System (CVIS) and DISCOVER.
Drills in ENGLISH in writing lab.
Tutorials in EDUCATIONAL PSYCHOLOGY at the graduate level and NURSING.

Computer(s): IBM 370/135

Terminals: 12 interactive; 1 remote batch

Contact(s): Dianne K. Garnett, Assistant Director
Computer Center
University of Evansville
P.O. Box 329
Evansville, IN 47702
(812) 479-2451

University of Notre Dame

Reasons for Nomination: Evaluation studies performed in cognitive domain, affective domain, and cost of instructional computing; development of CAI materials.

Enrollment: 8,800 Total **Annual Users:** 4,000

Illustrative Applications: 52 tutorial lessons in ECONOMICS for freshmen.
52 tutorial lessons in HISTORY of civilization.
58 tutorial lessons in ENGLISH grammar.

Computer(s): IBM 370/158

Terminals: 102 interactive

Contact(s): Robert E. Burns, Associate Dean
College of Arts and Letters
University of Notre Dame
137 O'Shaughnessy Hall
Notre Dame, IN 46556
(219) 283-7016

Wabash College

Reasons for Nomination: All students required to do a minimum of one project on computer; academic computing in nearly every department with heavy use in social science and physical and biological sciences.

Enrollment: 850 Total **Annual Users:** 850

Other Users: Two high schools.

Illustrative Applications: Simulations and statistical analysis in PSYCHOLOGY (modeled after MESS-Michigan Experimental Simulation System).
Analysis of data bases in POLITICAL SCIENCE.
Gaming and modeling in ECONOMICS and BIOLOGY.
Laboratory analysis in PHYSICS and CHEMISTRY.

Computer(s): DEC PDP 11/45

Terminals: 25 interactive

Contact(s): James A. Warden, Director
Computer Sciences
Cragwall Computer Center
Wabash College
Crawfordsville, IN 47933
(317) 362-1400, Ext. 303

Grinnell College

Reasons for Nomination: Long history of academic computing; spectrum of applications; have adapted CONDUIT materials for PDP 11/70; large computing budget for a small school.

Enrollment: 1,200 Total **Annual Users:** 600

Other Users: 15-20 high school and junior high school students.

Illustrative Applications: Programming in SCIENCE.
Problem-solving in MATHEMATICS.
Data analysis in STATISTICS and SOCIAL SCIENCES.
Simulations in SOCIAL SCIENCES.
Drills in elementary physics.
Text analysis in LANGUAGE.
Cluster analysis in ANTHROPOLOGY.

Computer(s): DEC PDP 11/70; access to Univ. of Iowa

Terminals: 20 interactive

Public Information: Newsletter, brochure; users guides

Contact(s): Thomas Moberg, Coordinator of Academic Computing
Grinnell College
Grinnell, IA 50112
(515) 236-6521

Luther College

Reasons for Nomination: Computer science major in a small school environment; locally developed and maintained hardware; computer has high utilization in the science and mathematics department.

Enrollment: 1,950 Total **Annual Users:** 1,300

Other Users: Northeast Iowa Computer Network 20 school districts (28,000 K-12)

Illustrative Applications: Drill and practice in MATHEMATICS and LANGUAGE ARTS.
Simulations in SCIENCE and SOCIAL SCIENCE.
Career guidance (Iowa Career Exploration Program).
Computer science (software and hardware from engineering and science viewpoint).
Problem-solving in MATHEMATICS.
Data base analysis in PSYCHOLOGY and SOCIOLOGY.

Computer(s): HP 3000; HP 2000 Access

Terminals: 22 interactive

Contact(s): Edward Thorland, Professor
Computer Science
Luther College
Decorah, IA 52101
(319) 387-1177

Morningside College

Reasons for Nomination: Student achievement studies show increased performance; student enthusiasm and perceptions of learning; educational computing at low cost; time-variable competency-based courses transcend time limits of the traditional 16-week semester.

Enrollment: 1,350 Total **Annual Users:** 150

Illustrative Applications: Testing in EDUCATION and SOCIAL SCIENCES.

Computer(s): IBM 5100; IBM 1130

Terminals: 1 interactive

Public Information: *Proceedings of 1977 Conference on Computers in Undergraduate Curricula.* Michigan State University.

Contact(s): Richard M. Evans
Assoc. Professor of Educational Psychology
Department of Education
Morningside College
Sioux City, IA 51106
(712) 277-5119

University of Iowa

Reasons for Nomination: Excellent computer facilities, innovative applications, strong support from central administration, utilization by a wide variety of academic departments.

Enrollment: 22,500 Total **Annual Users:** 9,900
18,100 FTE

Other Users: A Regional Computer Center which provides access to 15 small colleges and several high schools.

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Illustrative Applications: Computer concepts and programming in COMPUTER SCIENCE.
Graphics in GEOGRAPHY and ART.
Simulations in LAW, MEDICINE, SOCIOLOGY, POLITICAL SCIENCE, EDUCATION, and BUSINESS.
Drill and practice in FOREIGN LANGUAGES and MUSIC.
Tutorials in EDUCATION and MATHEMATICS.
Data analysis in BUSINESS, ENGINEERING, and STATISTICS.

Computer(s): 4 HP 2000 access systems; CDC Cyber 71; IBM 360/65, Burroughs 1700; access to Univ. of Illinois's PLATO system

Terminals: 204 interactive; 6 remote batch

Public Information: Computer Center Newsletter, Regional Computer Center Newsletter, User's Manual, and Technical Reports

Contact(s): Donald H. McClain
Computer-Based Education Specialist
Computer Center
University of Iowa
Iowa City, IA 52242
(319) 353-3170

Emporia State University

Reasons for Nomination: State-supported institution with extensive data processing training; graduates sought by industry and educational institutions.

Enrollment: 6,000 Total **Annual Users:** 2,000

Other Users: Local high schools.

Illustrative Applications: BUSINESS DATA PROCESSING curriculum.
COMPUTER SCIENCE courses in the MATHEMATICS department.
LIBRARY SCIENCE course in systems.
Modelling in BIOLOGY.
SOCIAL SCIENCE applications.

Computer(s): IBM 370/125

Terminals: 1 interactive

Contact(s): M. Lloyd Edwards, Director
Data Processing and Educational Measurement Center
Emporia, KS 66801
(316) 343-1200

Kansas State University

Reasons for Nomination: Ease of student access; quality of user services; creation and distribution of materials on responsibility of users; outreach program including planning assistance for farmers.

Enrollment: 18,000 FTE **Annual Users:** 4,410

Other Users: Local vocational tech schools, private and public colleges and universities, community college, state agencies.

Illustrative Applications: Problem-solving and simulation in AGRICULTURAL ECONOMICS.
COMPUTER SCIENCE and DATA PROCESSING.
Curricula offering PhD.
Heavy use by all ENGINEERING departments.
Statistical analysis.

Computer(s): IBM 370/158; IBM 370/145

Terminals: 20 interactive

Public Information: Annual Report, The Newsletter (10/year)

Contact(s): Tom Gallagher, Director
Computing Center
Kansas State University
Cardwell Hall, Room 10
Manhattan, KS 66506
(913) 532-6311

Transylvania University

Reasons for Nomination: Since 1965, academic computer science program in a very small university; achievements, fellowships, and distinctions awarded to computer science graduates.

Enrollment: 750 Total **Annual Users:** 300

Illustrative Applications: Academic COMPUTER SCIENCE program to A.B. degree.
Simulations and games in POLITICAL SCIENCE.
Community studies in SOCIOLOGY.
Lab simulations and problem-solving in MATHEMATICS and PHYSICS.
Animal laboratory experiments.

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Computer(s): IBM 1130; access to IBM 360/75

Public Information: Computing Center Guide.

Contact(s): James E. Miller, Director
Computer Science Program
Transylvania University
300 N. Broadway
Lexington, KY 40508
(606) 233-8134

Southern University and A&M College

Reasons for Nomination: Computer science department since 1968; curriculum study/workshop to assure responsiveness to business, industry, and graduate school needs; faculty development activities.

Enrollment: 9,000 - 10,000 Total **Annual Users:** 4,500

Illustrative Applications: 20-course computer science curriculum.
Example courses: software development and numeric analysis; systems programming.
Use of ECAP (Electronic Circuit Analysis Program) in ENGINEERING.
Problem-solving in BUSINESS and PHYSICAL SCIENCE.

Computer(s): IBM 370/125; DEC PDP 8

Terminals: 1 interactive; 1 remote batch

Contact(s): Leroy Roquemore, Chairman
Department of Computer Science
Southern University and A&M College
P.O. Box 10005
Baton Rouge, LA 70813
(504) 771-2060

Bates College

Reasons for Nomination: Long-range planning to provide expanded academic computing from remote host systems; operates as a distributor of computing for the NERCOMP network even though it has no local computer; established interactive computing classroom using large video screen.

Enrollment: 1,350 Total **Annual Users:** 600

Illustrative Applications: Computer capability demonstrated through a 6 x 8 foot screen in PSYCHOLOGY course in statistics where data sets are analyzed during the classroom session.
Computational programs are used in several courses teaching MATHEMATICS methods in Quantum CHEMISTRY.

Computer(s): Access on NERCOMP network

Terminals: 9 interactive

Contact(s): Gordon Wilcox, Director of Computing
Computing Center
Bates College
Lewiston, ME 04240
(207) 783-8111

Colby College

Reasons for Nomination: Computers an integral part of the natural and social sciences courses; sophisticated student body in using computer to solve analytical problems.

Enrollment: 1,600 Total **Annual Users:** 800

Illustrative Applications: Student programming in MATHEMATICS and PHYSICS.
Data analysis in MATHEMATICS, PHYSICS, SOCIOLOGY, and BUSINESS.
Simulations in SOCIOLOGY and BUSINESS.

Computer(s): DEC PDP 11/50

Terminals: 17 interactive

Contact(s): Kenneth W. Roberts, Director
Computer Center
Colby College
Waterville, ME 04901
(207) 873-1131

Goucher College

Reasons for Nomination: Four-year women's liberal arts college; long history of academic computing; offers open shop hands-on environment.

Enrollment: 900 Total **Annual Users:** 225

Other Users: Two high schools.

Illustrative Applications: Programming in COMPUTER SCIENCE.
Programming and computation in MATHEMATICS.
Simulations and statistical analysis in SOCIAL SCIENCES.

Computer(s): IBM 1130; access to Johns Hopkins University's DECsystem-10.

Terminals: 5 interactive

Contact(s): Patricia Powers, Director
Computer Center
Goucher College
Dulaney Valley Road
Towson, MD 21204
(301) 825-3300

Johns Hopkins University

Reasons for Nomination: Widespread use in many departments; goal of involving users in the humanities as well as sciences; development of graphics package; any student able to use computer; university funds projects.

Enrollment: 1,700 undergraduates
800 graduates
5,000 evening
Annual Users: 700 undergraduates & graduates; 100 evening school

Other Users: Goucher College, neighboring private schools.

Illustrative Applications: Heavy use by MATH SCIENCES department including classroom demonstrations.
Statistics for medical analysis, social work.
Large simulations of CHEMICAL theory.
Graphics applications in CRYSTALLOGRAPHY.
Problem-solving and laboratory assignments in ELECTRICAL ENGINEERING.

Computer(s): IBM 370/138, DECsystem-10; many departments with their own computers (i.e., EE DEC PDP 11/45, Psychology DEC PDP 11/40)

Terminals: 30 interactive

Public Information: Checkbits (monthly newsletter)

Contact(s): Solis James, Director
Computing Center
Roger Horn, Chairman
Math Sciences Department
Naddor, Professor
Math Sciences Department
Johns Hopkins University
Charles & 34th St., McGarland Hall
Baltimore, MD 21218
(301) 338-8098 (Mr. James)
(301) 338-7195 (Dr. Horn)
(301) 338-7216 (Dr. Naddor)

United States Naval Academy

Reasons for Nomination: Over 157 courses use computer extensively in many techniques; all freshmen required to take two credits in computer science, learn BASIC, and the use of interactive time-sharing terminals; use of the Dartmouth time-sharing system as an educational resource for over six years.

Enrollment: 4,300 Total **Annual Users:** 4,300

Illustrative Applications: All disciplines make some use of the computer and employ one or more of the following techniques:
Problem-solving
Graphics/plotting
Data reduction/analysis
Simulations/gaming
Drill and practice

Computer(s): Honeywell 635; DEC PDP 11; DEC PDP 15 hybrid; DEC PDP 8

Terminals: 300 interactive of which 50 are graphics

Contact(s): Richard A. Pollak
Associate Director for Educational Development
Academic Computing Center
U.S. Naval Academy
Ward Hall
Annapolis, MD 21402
(301) 267-3693

University of Maryland, College Park

Reasons for Nomination: Outstanding computer science program; high demand for all CS graduates; extensive use by many departments.

Enrollment: 36,000 FTE **Annual Users:** 10,000

Other Users: The five other branches of University of Maryland.

Illustrative Applications: Extensive (BS, MS, PhD) in COMPUTER SCIENCE and INFORMATION SYSTEMS MANAGEMENT.
Heavy use by departments of PHYSICS, ENGINEERING, PSYCHOLOGY, ASTRONOMY, SOCIAL SCIENCES.
Crystallography applications in CHEMISTRY.

Computer(s): UNIVAC 1108; UNIVAC 1100/41; several DEC PDP 11/45s

Terminals: 250 interactive; 51 remote batch

Public Information: Information available

Contact(s): William Atchison, Professor
Dick Austing, Professor
Computer Science Department
University of Maryland
College Park, MD 20742
(301) 454-4245 (Mr. Atchison)
(301) 454-2002 (Mr. Austing)

Assumption College

Reasons for Nomination: Facilities available 24 hours a day free of charge; funded through general college funds.

Enrollment: 1,500 Total **Annual Users:** 400

Illustrative Applications: Programming in COMPUTER SCIENCE.
Problem-solving in MATHEMATICS.
Lab analysis in PHYSICS and CHEMISTRY.
Data analysis in STATISTICS.
Data analysis and modeling in ECONOMICS.

Computer(s): DEC PDP 11/40

Terminals: 5 interactive

Contact(s): Kevin Haggerty, Director
Computing Center
Assumption College
500 Salisbury Street
Worcester, MA 01609
(617) 752-5615, Ext. 342

Babson College

Reasons for Nomination: Annual usage over 25 connect hours per student; available 24 hours a day; used in over 40% of all courses; low-cost cooperative computing; academic terminal connect year either $1800 or $2200 depending on computer used.

Enrollment: 1,900 FTE **Annual Users:** All

Other Users: Bunker Hill Community College; NEBHE; Perkins School; Regis; Simmons; Suffolk; Wellesley; MIT.

Illustrative Applications: CALCULUS.
Application systems in FINANCIAL MANAGEMENT.
Data analysis in STATISTICS, FINANCE, and SCIENCE Laboratory.
Application system in ACCOUNTING.
Simulations in MANAGEMENT, MARKETING, and FINANCE.

Computer(s): H/P 2000 access; ACCOMP Consortium's DEC PDP 11/70

Terminals: 28 interactive

Public Information: "Summary of Computing at Babson"; INDEX, an on-line catalog of programs (phone for access number)

Contact(s): Edgar T. Canty, Jr., Director
Academic Computing Services
Babson College
Babson Park, MA 02157
(617) 235-1200

Boston College

Reasons for Nomination: Established computer program for many years.

Enrollment: 12,000 FTE **Annual Users:** 3,000

Illustrative Applications: Model of national economy in ECONOMICS.
Computation in MATHEMATICS.

Computer(s): IBM 370/148; DEC PDP 11/70

Terminals: 36 interactive; 1 remote batch

Contact(s): Father Joseph Pomeroy
Director, Computer Center
Boston College
Chestnut Hill, MA 02167
(617) 969-0100; Ext. 3400

Boston University

Reasons for Nomination: Computer science program; academic computer budget supported by tuition dollars; unlimited student use of computer; growth for instruction and research over the last 5 years.

Enrollment: 23,000 Total **Annual Users:** 5,000
16,000 FTE

Illustrative Applications: Computational programs in PHYSICAL CHEMISTRY.
All freshmen ENGINEERING students required to take a course in programming.
Half of the liberal arts students take a course in DATA PROCESSING.

Computer(s): IBM 370/158

Terminals: 50 interactive

Contact(s): John Alman, Director
Academic Computing Center
Boston University
111 Cummington Street
Boston, MA 02215
(617) 353-2246

Harvard University

Reasons for Nomination: Computing literacy of students and faculty; innovative uses of multimedia in computer science curriculum.

Enrollment: 8,500 Total **Annual Users:** 3,000
2,500 Full time

Illustrative Applications: Social implications of computers and use of Harvard-developed PPL in HUMANITIES.
Simulations in CHEMISTRY.
COMPUTER SCIENCE program, multimedia.

Computer(s): DEC PDP 11/70

Terminals: 30 interactive; 1 remote batch

Contact(s): Thomas Cheatham, Director
Center for Research in Computing Technology
Harvard University
33 Oxford Street
Cambridge, MA 02138
(617) 495-3989

Massachusetts Institute of Technology

Reasons for Nomination: "State-of-the-art" systems and applications throughout campus; extensive use of computers in all departments; knowledgeable support staff and faculty.

Enrollment: 4,000 undergraduates (total) **Annual Users:** 6,000
3,000 graduates

Other Users: Colleges and universities needing specialized computation.

Illustrative Applications: Numerous applications in all departments.
Extensive COMPUTER SCIENCE curricula in various departments.
Interactive displays in laboratory of ARCHITECTURE and PLANNING.
Heavy users include departments of CHEMICAL, MECHANICAL, CIVIL, and ELECTRICAL ENGINEERING and PHYSICS.

Computer(s): 100+ computers on campus including: Honeywell 6180; IBM 360/65; IBM 1130; IBM 370/168; many DEC PDP 10s; numerous DEC PDP 11s, 3 INTERDATA

Terminals: 400 interactive

Public Information: The Bulletin (monthly newsletter)

Contact(s): Weston J. Burner, Director
Information Processing Services
MIT
Building 39, Room 565
77 Mass. Avenue
Cambridge, MA 02139
(617) 253-7848

University of Massachusetts

Reasons for Nomination: Pioneer in time-sharing in 1966; student uses increase 20% per year despite constant budget; spectrum of applications; outreach to other colleges; developed CDC's APL.

Enrollment: 30,500 FTE **Annual Users:** 7,200

Other Users: Hampshire College, Amherst, Mt. Holyoke, Smith, Nercomp.

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Illustrative Applications: 93 user departments. Over 100 courses per semester including 1800 students lower division, in introduction to arts of computing.
SPSS use in SOCIOLOGY.
Developing interactive statistics package in APL for use with variety of data bases.
Curriculum in ENGINEERING DESIGN.
CMI in ENGINEERING and BUSINESS.

Computer(s): CDC Cyber 74; access to University of Illinois's PLATO Network

Terminals: 300 interactive; several graphics terminals; 4 remote batch

Public Information: Bi-monthly newsletter, "Bits & Bytes."

Contact(s): Conrad A. Wogrin, Director
University Computer Center
University of Massachusetts
Graduate Research Center
Amherst, MA 01003
(413) 545-2690

Wentworth Institute and Wentworth College of Technology

Reasons for Nomination: Computer science curriculum; computer use integrated through spectrum of departments; 2-year and 4-year programs offered.

Enrollment: 2,000 Total **Annual Users:** 1,600

Illustrative Applications: Courses for unemployed and non-high school students (limited basis).
Languages, programming, data bases (MIS), graphics, MATHEMATICS modeling, statistical analysis, tutorials in COMPUTER SCIENCE.
Computer science knowledge applied in most disciplines.

Computer(s): DEC PDP 11/70

Terminals: 7 interactive

Contact(s): Richard Wallace, Department Head
Computer Science Technology
Wentworth Institute & Wentworth College of Technology
550 Huntington Avenue
Boston, MA 02115
(617) 442-9010, Ext. 358

Worcester Polytechnic Institute

Reasons for Nomination: "WPI Plan" independent study model; academic computing in every discipline; unlimited access and computer time given to students; students' choice of batch or interactive mode.

Enrollment: 2,200 Total **Annual Users:** All

Illustrative Applications: Programming and system development in COMPUTER SCIENCE.
Simulations in MANAGEMENT.
Graphics in CHEMISTRY.
ICES (Integrated Civil Engineering Subsystem) in CIVIL ENGINEERING.

Computer(s): DEC PDP 10; UNIVAC 90/60

Terminals: 22 interactive

Public Information: Monthly newsletter

Contact(s): James J. Jackson, Jr., Director
Computer Center
Worcester Polytechnic Institute
Worcester Area College Comp. Center
Worcester, MA 01609
(617) 753-1411

Hope College

Reasons for Nomination: Textbooks produced on use of computers in particular disciplines; computer science major program; academic computing in many departments.

Enrollment: 2,011 Total **Annual Users:** 300

Other Users: Two high schools.

Illustrative Applications: Programming, simulation, test generation in COMPUTER SCIENCE.
Programming, computation, and graphics in MATHEMATICS.
Tutorials and on-line testing in SPANISH.
Programming, tutorials, data analysis in PHYSICS.

Computer(s): Xerox Sigma 6

Terminals: 30 interactive

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Public Information: Presentation to the Conference on Computers in undergraduate curricula on academic computing at Hope College

Contact(s): John Watson, Director
Computer Center
Hope College
Holland, MI 49423
(616) 392-5111

Kalamazoo College

Reasons for Nomination: Long history of academic computing; facilities available to all students.

Enrollment: 1,400 Total

Illustrative Applications: Programming and simulation in COMPUTER SCIENCE.
Programming and computation in MATHEMATICS.
Statistical analysis in CHEMISTRY and PHYSICS.

Computer(s): Western Michigan University's DECsystem-10

Terminals: 9 interactive

Contact(s): David Rogers, Director
Academic Computing
Kalamazoo College
Kalamazoo, MI 49007
(616) 383-8418

Michigan State University

Reasons for Nomination: Varied applications; established programs.

Enrollment: 43,700 Total **Annual Users:** 18,000

Other Users: Community colleges, private colleges, local high schools.

Illustrative Applications: TECHNOLOGY ASSESSMENT simulation games.
Curriculum guidance for majors in PHYSICS and CIVIL ENGINEERING.
POPULATION simulations.
Statistics for RESEARCH METHODS courses.
Tutorials in PSYCHOLOGY.
Writing style and spelling tests in JOURNALISM.
Simulations and calculations in BUSINESS.
CAI in remedial MATHEMATICS
Problem-solving decision table processor in COMPUTER SCIENCE.

Computer(s): CDC 6500; HP 2000 Access

Terminals: 102 interactive; 9 remote batch

Public Information: Brochure, newsletters, user guides, annual report

Contact(s): Tom W. Carroll (CDC 6500)
Director of User Services
Computer Laboratory
Leighton Price (HP 2000)
Coordinator of Instructional and Research Programs
Computer Institute for Social Science Research
Michigan State University
East Lansing, MI 48824
(517) 353-7228 (Dr. Carroll)
(517) 353-2040 (Dr. Price)

Saginaw Valley State College

Reasons for Nomination: Offers majors in data processing and computer mathematics; low student-teacher ratio; rapid turn-around time for jobs; coop education places students in industry for one term.

Enrollment: 3,320 Total **Annual Users:** 350

Other Users: Three or four neighboring high schools.

Illustrative Applications: Wide range of programming languages and modeling in DATA PROCESSING.
Programming and computer design theory in COMPUTER MATHEMATICS.
Statistical analysis, linear programming, and gaming in BUSINESS.

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Computer(s): Digital Scientific Meta Four; Michigan State University's CDC

Terminals: 1 remote batch

Public Information: Information available on request.

Contact(s): Don Seidel, Acting Director
Academic & Administrative Data Processing
Saginaw Valley State College
University Center, MI 48710
(517) 793-9800, Ext. 347

University of Michigan

Reasons for Nomination: Distribution of computer facilities and expertise over entire campus; academic computing since 1958; assistance available to faculty using the computer for instruction; MERIT Network participant.

Enrollment: 36,000 Total **Annual Users:** 9,000

Other Users: MERIT Network members.

Illustrative Applications: Department of Computer and Communication Sciences.
Applications in 37 colleges, departments and institutes.
Heavy use in the College of ENGINEERING including graphics laboratory.
Simulations of environmental planning in the School of NATURAL RESOURCES.
Data analysis and special projects for PHYSICS students.
Data analysis and computer conferencing in POLITICAL SCIENCE.
Test construction and graphics in School of DENTISTRY.

Computer(s): Amdahl 470V/6; IBM 370/158; DEC PDP 10 (Physics) IBM 1150 (Natural Resources), DEC PDP 8 (Psychology) Prime 400 (Dentistry), etc.

Terminals: 300 interactive

Public Information: Newsletter; survey; additional documents available

Contact(s): Karl Zinn, Research Scientist
Center for Research on Learning and Teaching
University of Michigan
109 E. Madison Street
Ann Arbor, MI 48104
(313) 763-4410

Robert Bartels, Director
Computing Center
University of Michigan
1075 Beal Avenue
Ann Arbor, MI 48109
(313) 764-9572

Bemidji State University

Reasons for Nomination: Educational program for teachers in computer science; conducts inservice workshop for teachers in over 10 states.

Enrollment: 4,000 FTE **Annual Users:** 800

Illustrative Applications: 20 computer science courses in areas such as operations research, numerical analysis, and programming.

Computer(s): State university system's UNIVAC 1106.

Terminals: 15 interactive; 1 remote batch

Contact(s): Ken Massa, Assistant Professor of Mathematics & Computer Science
Bemidji State University
Bemidji, MN 56601
(218) 755-2831

Carleton College

Reasons for Nomination: Attitudinal and computing literacy student surveys; academic computing in 11 of 19 institutional departments; faculty and student development of mathematics and statistics programs; SPSS modified to work on all PDP 11 models.

Enrollment: 1,640 Total **Annual U rs:** 840

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Other Users: Northfield Public Schools have terminals which tie into the system.

Illustrative Applications: Simulations, graphics, and lab control in SCIENCES.
Lab control and statistical analysis in SOCIAL SCIENCES.
COMPUTER SCIENCE courses in MATHEMATICS.

Computer(s): DEC PDP 11/20; DEC PDP 8I; 6 DEC PDP 8L

Terminals: 20 interactive

Contact(s): Graham Kimble, Director
Computing Activities
Carleton College
Northfield, MN 55057
(507) 645-4431; Ext. 204

Mankato State University

Reasons for Nomination: Computer a free resource for students and faculty; reputation of computer science graduates; pioneer in time-sharing for educational applications in Minnesota.

Enrollment: 12,000 Total **Annual Users:** 2,000

Illustrative Applications: Systems and linear programming, systems analysis, plotting design, and telecommunications in COMPUTER SCIENCE, undergraduate level.
Numerical analysis, computation, artificial intelligence, and compiler design at graduate level.
Numerical analysis in MATHEMATICS.
Simulations in URBAN STUDIES.

Computer(s): UNIVAC 11/06; DEC PDP 8; access to community UNIVAC 11/10.

Terminals: 30 interactive; 2 remote batch

Public Information: Brochure on computer science program

Contact(s): Donald Henderson, Chairman
Computer Science Department
Mankato State University
Mankato, MN 56001
(507) 389-2618

Southwest State University

Reasons for Nomination: Outreach to rural areas; in-service training program in CAI; CAI an integral part of many subject areas.

Enrollment: 1,350 FTE **Annual Users:** 300

Other Users: Neighboring elementary and secondary schools and two-year colleges.

Illustrative Applications: Cultural unit on computers in APPLIED MATHEMATICS.
Assembly language for minicomputers and microcomputers in COMPUTER SCIENCE.
Computers in society workshops for elementary and secondary teachers.

Computer(s): Data General Nova; UNIVAC 1106; member of State University System

Terminals: 12 interactive; 2 remote batch

Contact(s): Paul Enersen, Assistant
Dept. of Math. and Computer Science
Southwest State University
Marshall, MN 56258

Jackson State University

Reasons for Nomination: Outreach to disadvantaged minority groups, providing interactive computing to nineteen institutions at reasonable cost; integration of computing into spectrum of curricula.

Enrollment: 8,000 Total **Annual Users:** 2,000

Other Users: High schools and colleges

Illustrative Applications: Student programming and problem-solving in MATHEMATICS, STATISTICS, BUSINESS, CHEMISTRY, SOCIAL SCIENCE.

Computer(s): IBM 370/145

Terminals: 14 interactive

Public Information: Regional Educational Computing Network—Final Report

Contact(s): Jesse Lewis, Director
Computer Center
Jackson State University
Jackson, MS 39217
(601) 968-2144

Northern Montana College

Reasons for Nomination: Small college in remote area; outreach to public schools; computing literacy in teacher training; addressing communications networking.

Enrollment: 1,200 FTE **Annual Users:** 200

Other Users: Public schools.

Illustrative Applications:
Computer option in MATHEMATICS EDUCATION.
Tree classification in BIOLOGY.
Simulations in CHEMISTRY and PHYSICS.

Computer(s): Montana State University's Xerox Sigma 7; HP 2000; DEC PDP 11/70

Terminals: 7 interactive; (17 planned)

Contact(s):
James Smith, Associate Professor
William Brumley
Department of Mathematics
Northern Montana College
Havre, MT 59501
(406) 265-7821

Dartmouth College

Reasons for Nomination: Pioneer in time-sharing; operating system designed for use in educational environment; open access computing to all students; strong computer council composed of faculty, administration, students; spectrum of applications; 97% of graduates use computing.

Enrollment: 4,000 undergraduates 750 graduates **Annual Users:** Over 2,000 undergraduates

Other Users: Merchant Marine Academy; Coast Guard Academy; New England colleges and public schools; other users nationally via Telenet.

Illustrative Applications:
Formal coursework in about 184 courses.
Modeling in ENVIRONMENTAL STUDIES.
MUSIC composition aids.
Drills and tutorials in CLIMATOLOGY and REMEDIAL ENGLISH.
Social survey work in SOCIOLOGY.

Computer(s): Honeywell 66/40 Duplex

Terminals: 350

Public Information: Contact Publications Office at Kiewit Center

Contact(s):
Thomas Kurtz, Director
Office of Academic Computing
Dartmouth College
Kiewit Center
Hanover, NH 03755
(603) 646-2923

Kean College of New Jersey

Reasons for Nomination: Initiated computer-science courses in 1964; interdepartmental program has continued to expand; first state college in New Jersey to give a BS in computer science.

Enrollment: 14,000 Total **Annual Users:** 2,000

Illustrative Applications:
COMPUTER SCIENCE curriculum of 27 courses.
Simulations in EARTH SCIENCE and BIOLOGY.
Problem-solving in MATHEMATICS, STATISTICS.
MANAGEMENT SCIENCE applications.

Computer(s): IBM 1130; State Network's IBM 370/168 and IBM 370/158

Terminals: 8 interactive; 1 remote batch

Contact(s):
Regina Garb, Coordinator of Computer Science & Professor of Math.
Stanley Lipson, Chairman of Math./ Computer Science
Kean College of New Jersey
Morris Avenue
Union, NJ 07083
(201) 527-2367 (Dr. Garb)
(201) 527-2104 (Dr. Lipson)

Rutgers University

Reasons for Nomination: Range of computer services offered to faculty and students; consulting, documentation, hardware and software services, education, research facilities for instructional purposes; services distributed across three cities at seven locations; large education program offered to the user community.

Enrollment: 39,681 FTE **Annual Users:** 18,000

Other Users: Sharing of resources through membership in a statewide network; consulting help provided to several colleges and universities; consultation with local, county, and state offices in the area of census material.

Illustrative Applications:
Computer Science Department, supported through hardware and software services, is heavily involved with artificial intelligence research.
Simulation within Rutgers and between Rutgers and other institutions.
Statistical analysis in EDUCATION, SOCIAL SCIENCES, and PSYCHOLOGY.
Basic Skills Laboratory, Camden Campus, serves ENGLISH and MATHEMATICS Departments.
Data Base material, such as census material, takes place in 20 depts.
PLATO terminals used for CHEMISTRY at the Newark Campus.

Computer(s): New Jersey Educational Computer Network's IBM 370/158 and IBM 370/168; DEC PDP 10; HP 2000 Access; HP 3000; DEC PDP 8; Data 100; Hewlett Packard IBM 2922; IBM 1130; and others

Terminals: 208 interactive; 7 remote batch; plus 2 plotters, graphics

Public Information: Bi-monthly newsletter, brochures, PDP/10 Newsletter, announcements in University newsletters and student newspapers, wide range of documentation.

Contact(s):
Richard F. Storer, Director
Rutgers University
CCIS
Hill Center, Busch Campus
P.O. Box 879
Piscataway, NJ 08854
(201) 932-2498

Rutgers University, Camden Campus

Reasons for Nomination: Extensive use of SPSS in social sciences; CAI program in remediation of basic reading and mathematics skills.

Enrollment: 3,200 Total

Illustrative Applications:
Lab analysis in PHYSICS and CHEMISTRY.
SPSS and data analysis in PSYCHOLOGY.
SPSS, data analysis, data tape computations in SOCIOLOGY.
CAI remedial skills program.
Real time analysis of animal behavior.

Computer(s): Camden Campus's HP 3000 and DEC PDP 8; New Brunswick Campus's IBM 360

Terminals: 16 interactive; 2 remote batch

Public Information: CCIS newsletter available from Computer Center, Rutgers University, New Brunswick, NJ 08903

Contact(s):
Gerald Waterson, Director Computer Ctr.
Michael Wogan, Dept. of Psychology
Rutgers University (Camden Campus)
311 N. Fifth Street
Camden, NJ 08102
(609) 757-6065

Stevens Institute of Technology

Reasons for Nomination: All undergraduates introduced to computing; computing in most departments; software development by students with faculty guidance; open facilities; MS degree in computer science; computer science at doctoral level with plans for degree program.

Enrollment: 1,150 undergraduate; 800 graduate. **Annual Users:** 1,200

Other Users: Three high schools.

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Illustrative Applications: Computing fully integrated into CHEMISTRY curriculum.
Data analysis in PHYSICS.
COMPUTER SCIENCE concentration in MATHEMATICS, MANAGEMENT SCIENCE and ELECTRICAL ENGINEERING in Master's degree program.
Interdisciplinary program offered.
Hardware/software design and lab research in ENGINEERING.

Computer(s): DECsystem-10

Terminals: 40 interactive

Contact(s): Leslie Maltz, Director
Computer Center
Stevens Institute of Technology
Castle Point Station
Hoboken, NJ 07030
(201) 792-2700

New Mexico State University

Reasons for Nomination: Free access computing; large amount of software support; growing faculty usage; interactive modeling.

Enrollment: 10,000 Total **Annual Users:** 2,500

Other Users: State Bureau of Revenue—interactive financial modeling. EIA Air Quality Division—interactive environmental modeling.

Illustrative Applications: Drill and practice in MATHEMATICS.
Lessons in SPANISH.
Simulations in BUSINESS.
Test generation, current flow modeling in ELECTRICAL ENGINEERING.
Statistical modeling.

Computer(s): IBM 360/65

Terminals: 60 interactive; some graphics

Public Information: Computer Center Newsletter, Introductory Brochure, free access to On-Line Documentation System

Contact(s): William Estes, Manager User Services
New Mexico University
Box 3AT
Las Cruces, NM 88003
(505) 646-4433

University of New Mexico

Reasons for Nomination: Academic computing in calculus; 95% placement of computer science graduates.

Enrollment: 21,000 Total **Annual Users:** 6,000
18,000 FTE 7,000

Illustrative Applications: Graduate student use in ARTS and SCIENCE.
All freshman ENGINEERING students learn FORTRAN to write simulations and problem-solving.
COMPUTER SCIENCE program through masters level.
Computer ART and graphics.

Computer(s): IBM 360/67

Terminals: 70 interactive; 2 remote batch

Contact(s): Stoughton Bell, Director
Academic Computer
University of New Mexico
Albuquerque, NM 87131
(565) 277-4822

Canisius College

Reasons for Nomination: Laboratory automation courses; high degree of computing literacy among both science and non-science majors.

Enrollment: 2,400 Total **Annual Users:** 1,200

Other Users: Elementary and secondary school field trips.

Illustrative Applications: Developed curriculum based on "Minicomputers and Microprocessors in Laboratory Automation," American Chemical Society Course.
Simulations for non-science majors.
Introduction to scientific computing required of science majors.

Computer(s): Burroughs 2720; Data General Nova 11; Data General Supernova; two DEC LS1 11

Terminals: 16 interactive

Contact(s): Jim Leone, Associate Professor of Chemistry and Computer Science
Canisius College
Buffalo, NY 14208
(716) 883-7000, Ext. 332, 262

Clarkson College

Reasons for Nomination: Extensive use in engineering; total integration of computer with school library; administrative support of program.

Enrollment: 3,200 Total **Annual Users:** 2,400

Other Users: Three colleges.

Illustrative Applications: Computer science option in ENGINEERING and MATHEMATICS.
Simulations, programming, and graphics in COMPUTER SCIENCE.
Simulations and games in BUSINESS.

Computer(s): IBM 360/65

Terminals: 22 interactive

Public Information: Newsletter

Contact(s): Newton Munson, Manager
Academic Services
Computer Center
Clarkson College
Potsdam, NY 13676
(315) 268-7721

Columbia University

Reasons for Nomination: Academic computing since 1945; present computer center founded 1963; academic computing in every department of the University; increased emphasis on instructional use of computer during past five years; students have open access to computer via batch or time-sharing.

Enrollment: 16,000 FTE **Annual Users:** 2,500

Other Users: Neighboring colleges and universities.

Illustrative Applications: COMPUTER SCIENCE curricula in departments of ELECTRICAL ENGINEERING and MATHEMATICAL STATISTICS, all levels.
Required computing course in Graduate School of Business.
Heavy use in Schools of ENGINEERING, ARTS & SCIENCES, PUBLIC HEALTH, ARCHITECTURE and PLANNING, LIBRARY SERVICES, Teachers College.
New applications in INTERNATIONAL AFFAIRS.
Continuing EDUCATION.

Computer(s): IBM 360/91; IBM 360/75; IBM 370/148; DECsystem 2050; DEC PDP 11/50; minicompters used for specialized purposes in departments

Terminals: 150

Public Information: Center for Computing Activities Newsletter, Annual Bulletin

Contact(s): Jessica Gordon, Assistant Director
Center for Computing Activities
Columbia University
New York, NY 10027
(212) 280-2454

Daemen College

Reasons for Nomination: Computer science curricula featuring real-life applications; emphasis on computer literacy.

Enrollment: 1,000 Total **Annual Users:** 160

Illustrative Applications: COMPUTER SCIENCE courses in introductory programming, programming in SCIENCE and MATHEMATICS, systems analysis, test analysis for psychological testing, and patient management-medical billing.
Data analysis in STATISTICS.

Computer(s): CDC Cyber 173 at Suny-Buffalo

Terminals: 1 interactive

Contact(s): Marie T. Dixon, Associate Professor
Daemen College
4380 Main Street
Amherst, NY 14226
(716) 839-3600

Hamilton/Kirkland Colleges

Reasons for Nomination: Small college with computer as an integral part of the academic program, extensive use in social sciences.

Enrollment: 1,600 Total **Annual Users:** 500

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Illustrative Applications: Survey work in SOCIAL SCIENCES, PHYSICS and PSYCHOLOGY students use computer for data collection, and analysis.
Quantitative work in HISTORY.
Programming and problem-solving in MATHEMATICS and COMPUTER SCIENCE.
Population genetics studies in BIOLOGY.

Computer(s): HP 9820; DEC PDP 8; NCR 101 linked to Cornell's IBM 370/168

Terminals: 1 remote batch

Contact(s): David Smallen, Director
Computer Center
Hamilton College
Clinton, NY 13323
(315) 859-4169

Ithaca College

Reasons for Nomination: Funding increased tenfold since 1970; computer literacy program in business data processing; active student user population; faculty and advanced students active in microprocessors and digital logic design; intensive computer science program.

Enrollment: 4,200 Total **Annual Users:** 450

Illustrative Applications: Business DATA PROCESSING.
Programming in COMPUTER SCIENCE.
Data analysis in SPEECH PATHOLOGY.
Simulations and data analysis in BUSINESS.

Computer(s): UNIVAC 70/46; DEC PDP 8; Imsai 8080

Terminals: 14 interactive; 1 remote batch

Contact(s): David Lewis, Assistant Professor of Mathematics
Ithaca College
Muller Faculty Center
Ithaca, NY 14850
(607) 274-3108

Marist College

Reasons for Nomination: Computer mathematics major curriculum; computer internship; introduction to computing for liberal arts majors; integration of computing in spectrum of courses.

Enrollment: 1,500 Total

Illustrative Applications: Programming in COMPUTER SCIENCE and MATHEMATICS.
Lower division liberal arts majors learn programming and do computer projects.

Computer(s): IBM 1401; access to SECOS Network

Terminals: 4 interactive

Contact(s): Kevin Corolan, Director
Computing & Institutional Research
Marist College
Poughkeepsie, NY 12601
(914) 471-3240, Ext. 206

National Technical Institute for the Deaf

Reasons for Nomination: Comprehensive training for faculty in CAI curriculum development; CAI evaluation procedures; research on learning and teaching of deaf via computer.

Enrollment: Deaf students 900 Total **Annual Users:** 75 in Computer Science & 480 utilize CAI

Other Users: Rochester Institute of Technology.

Illustrative Applications: CAI/TV on portable 16K Wang minicomputer teaches speech reading, receptive signing.
Multimedia CAI course in RECORDS MANAGEMENT.
CAI courses in ELECTRONICS, MEDICAL TECHNOLOGY, CHEMISTRY.

Computer(s): IBM 1500; Wang Minicomputer; access to Rochester Institute of Technology

Terminals: 13 interactive

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Public Information: Various reports such as: Project SKILL (faculty training program). Survey of CAI for Education of Deaf. A Comparison of CAI and Instructional Television in Teaching Cognitive Skills.

Contact(s): James vonFeldt, Media Specialist
Coordinating CAI
Rochester Institute of Technology/NTID
1 Lomb Memorial Drive
Rochester, NY 14623
(716) 464-6370

New York Institute of Technology

Reasons for Nomination: Many years of research in computer-mediated instruction including the use of graphics; CMI/CAI outreach to high schools.

Enrollment: 15,000 Total **Annual Users:** 3,000

Other Users: 5,000 high school users in a CMI/CAI mode.

Illustrative Applications: Graphics lab for graduate students performing research in animation techniques.
Simulation labs in PHYSICS using simulated instruments on graphics minicomputers.

Computer(s): Xerox Sigma 9; various minicomputers

Terminals: 128 interactive

Contact(s): Alan Rosenblum, Director
Computer Center
Harvey Pollack, Learning Management Resources Center
New York Institute of Technology
Wheatley Road
Old Westbury, NY 11568
(516) 686-7570 (Mr. Rosenblum)
(516) 686-7655 (Mr. Pollack)

New York University Institute of Mathematical Sciences

Reasons for Nomination: Computer service facilities used nationwide; academic computing part of annual budget; pragmatically-oriented graduate computer science program based on theoretical work; graduates in great demand.

Enrollment: 350 Total **Annual Users:** 150

Illustrative Applications: Graduate program in COMPUTER SCIENCE.
Student development of new programming languages.
Analysis of natural language.
Operating system design.

Computer(s): CDC 6600

Terminals: 24 interactive; 2 remote batch

Public Information: Brochure describing computer science graduate program

Contact(s): Jacob T. Schwartz, Chairman
Computer Science Department
New York University; Courant Institute of Mathematical Sciences
251 Mercer Street
New York, NY 10012
(212) 460-7100

State University of New York at Plattsburgh

Reasons for Nomination: Interdisciplinary program for majors in computer science and minors in other disciplines.

Enrollment: 6,000 Total **Annual Users:** 1,000
5,500 FTE

Illustrative Applications: Applications-oriented simulations in COMPUTER SCIENCE for use in study in ECOLOGY and BUSINESS.

Computer(s): Burroughs B4700; UNIVAC 1110

Terminals: 3 interactive

Contact(s): Julius Archibald, Jr., Chairman
Dept. of Computer Science
State University of New York College at Plattsburgh
Plattsburgh, NY 12901
(518) 564-2116

U.S. Military Academy at West Point

Reasons for Nomination: Total integration of computing in the curriculum; all freshmen learn programming; use of computer graphics in many disciplines.

Enrollment: 4,400 Total **Annual Users:** 4,400

Other Users: Coast Guard Academy, Merchant Marine Academy, Army War College.

Illustrative Applications: Use computer graphics in MATHEMATICS to aid understanding of procedures and functions.
Design optimization in ENGINEERING.
Mathematical modeling.
Analysis of lab data in PHYSICS and CHEMISTRY.
ENGINEERING fundamentals, drafting, surveying applications.

Computer(s): Honeywell 6080; 2 IMLAC PDS-1 graphics systems; variety of mini- and microcomputers

Terminals: 160 interactive

Public Information: Academic Computer Center User Notes

Contact(s): William Luebbert, Director of Academic Computer Center
Lance Leach
Office of the Dean, USMA
U.S. Military Academy at West Point
West Point, NY 10996
(914) 938-4011, Ext. 4472

Appalachian State University

Reasons for Nomination: Outreach program serving area schools; expanding program over seven years.

Enrollment: 10,000 Total **Annual Users:** 1,000

Other Users: Nine community colleges, eleven high schools.

Illustrative Applications: BUSINESS DATA PROCESSING curriculum.
COMPUTER SCIENCE courses in the MATHEMATICS department.
Statistical analysis on data bases in the SOCIAL SCIENCES.

Computer(s): RCA Spectra 70

Terminals: 30 interactive; 2 remote batch

Contact(s): Emily Gloster, Director
School Support Service
College of Continuing Education
Appalachian State University
Whitner Hall
Boone, NC 28608
(704) 262-2000

Bennett College

Reasons for Nomination: Small minority women's college; academic computing to improve basic skills in mathematics, English, and reading; faculty development of math and English exercises; self-paced learning.

Enrollment: 600 Total **Annual Users:** 450

Other Users: Culturally and financially disadvantaged high school students (50/week).

Illustrative Applications: Computation and tutorials in MATHEMATICS.
Tutorials and diagnostics in READING.
Tutorials in ENGLISH.

Computer(s): IBM 1130; HP 2000

Terminals: 16 interactive

Public Information: Brochure describing the computer-assisted innovation center at Bennett College

Contact(s): Nelouise D. Watkins, Director
Computer Center
Bennett College
Macon Street
Greensboro, NC 27420
(919) 272-2531

Catawba College

Reasons for Nomination: Low-cost computing in a small college; accomplishments of student programmers.

Enrollment: 920 **Annual Users:** 250

Other Users: High school students in a summer program from five county surrounding area (100 per summer).

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Illustrative Applications: Statistics packages (various ones) in SOCIOLOGY, BIOLOGY, POLITICAL SCIENCE, MATHEMATICS.
Languages in COMPUTER SCIENCE.
Modeling in PUBLIC ADMINISTRATION, BUSINESS ADMINISTRATION, POLITICAL SCIENCE.
Various mathematical applications - e.g., numerical analysis.

Computer(s): IBM 1130

Terminals: None (console available for interactive use)

Contact(s): James C. Miller, Assistant Professor
Mathematics Department
Catawba College
Salisbury, NC 28144
(704) 637-4452 (office)
(704) 637-4424 (Computer Center)

Fayetteville Technical Institute

Reasons for Nomination: Pioneer in academic computing for technical schools in North Carolina.

Enrollment: 4,000 Total **Annual Users:** 400

Illustrative Applications: Programming in DATA PROCESSING.
Simulations in BUSINESS and ACCOUNTING.
Survey and critical path analysis in CIVIL ENGINEERING.

Computer(s): NCR Century 151

Contact(s): Henry J. Baran, Program Manager
Computer Center
Fayetteville Technical Institute
P.O. Box 35236
Fayetteville, NC 28303
(919) 323-1961, Ext. 232, 233, or 286

North Carolina State University

Reasons for Nomination: System resource has multiple levels of interactive computing; low-cost services offered to provide economical student use.

Enrollment: 14,000 Total **Annual Users:** 4-5,000

Illustrative Applications: General programming training in macro- and microcomputers for COMPUTER SCIENCE and ELECTRICAL ENGINEERING students at Bachelor and Master degree levels.
Applications programming in 50 campus departments including the HUMANITIES, and SOCIAL, BIOLOGICAL, and ENGINEERING SCIENCES. Programming is done for instructional applications and research analyses in all major programming languages and most minor ones that can be used on IBM type equipment. Both batch and interactive facilities are widely utilized.

Computer(s): TUCC's 2 IBM 370/165

Terminals: 115 interactive

Contact(s): Richard A. Usanis, Director
Computing Center
North Carolina State University
Raleigh, NC 27607
(919) 737-2517

University of North Carolina, Asheville

Reasons for Nomination: Network linking the university and local high schools; promoting use of the computer in non-traditional areas; providing low-cost computing for large number of students.

Enrollment: 1,600 Total **Annual Users:** 800
1,200 FTE

Other Users: Local high schools and one college.

Illustrative Applications: Scientific and computer programming courses in the MATHEMATICS and PHYSICS departments.
Simulations in SOCIAL SCIENCE.
Data analysis and problem-solving in many PHYSICS courses.
Heavy use in MATHEMATICS courses.
Simulations used in required HUMANITIES course on contemporary and future problems.

Computer(s): DEC PDP 11/40; TUCCs' IBM 370

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Terminals: 8 interactive; 2 remote batch; 8 interactive terminals off campus

Public Information: Information available

Contact(s): James Vinson, Physics Chairman and Director, Computer Center
University of North Carolina-Asheville
Asheville, NC 28804
(704) 258-0200

University of North Carolina, Chapel Hill

Reasons for Nomination: Every department using computer in either instruction or research; most graduate students learn to use computers in their research; state legislature directly allocates funds to center; computer science curriculum.

Enrollment: 20,000 Total **Annual Users:** 10,000

Illustrative Applications: Medical sciences teaching laboratory has CAI for ANATOMY courses.
COMPUTER SCIENCE department developed package for teaching PL/I programming.
Large group of programs developed for teaching STATISTICS.
Institute for Research in Social Sciences has packages teaching people to look at research data.
PHILOSOPHY majors use LISP for theorem proving.

Computer(s): TUCC's IBM 370/165; IBM 360/75; IBM 370/155

Terminals: 182 interactive

Public Information: Computation Center Newsletter

Contact(s): James Batter, Director, Computer Center
37 Phillips Hall
Fred Brooks, Chairman
Computer Science Department
New West Hall
Charles Bennett
Berryhill Hall
University of North Carolina at Chapel Hill
Chapel Hill, NC 27514
(919) 933-6501

University of North Carolina, Wilmington

Reasons for Nomination: Model computer science BS program using remote computing facilities.

Enrollment: 3,500 Total **Annual Users:** 1,000

Illustrative Applications: Theoretical course in discrete structures in ALGEBRA.
Data structures compiler construction, and computer hardware organization in COMPUTER SCIENCE.
SPSS in SOCIOLOGY.

Computer(s): TUCC Network

Terminals: 10 interactive

Contact(s): Fred Toney, Chairman
Department of Mathematical Sciences
University of North Carolina at Wilmington
P.O. Box 3725
Wilmington, NC 28401
(919) 791-4330

Dickinson State College

Reasons for Nomination: Sophisticated facilities for small school; involvement of local high schools; local development of computer-based materials.

Enrollment: 1,000 Total **Annual Users:** 200

Other Users: Six high schools.

Illustrative Applications: Problem-solving in MATHEMATICS, PHYSICS, BIOLOGY, SOCIAL SCIENCE.
COMPUTER SCIENCE curriculum including an introductory BASIC course taken by the majority of student body.
CAI in MATHEMATICS, BUSINESS, GERMAN.

Computer(s): DEC PDP 8E, access to University of North Dakota's IBM 370/135

Terminals: 4 interactive

Public Information: Computing Services Newsletter (quarterly) brochure

Contact(s): Bill Lardy, Coordinator of Computing Service
Dickinson State College
Dickinson, ND 58601
(701) 227-2109

North Dakota State University

Reasons for Nomination: Substantial number of students and faculty involved in computer use, wide range of disciplines which use the computer.

Enrollment: 6,800 Total **Annual Users:** 1,000

Other Users: High schools, commercial users.

Illustrative Applications: Various statistical packages used for AGRICULTURE, HOME ECONOMICS, PHYSICS, CHEMISTRY, MATHEMATICS.

Computer(s): IBM 360/50

Terminals: 13 interactive

Public Information: Computer Center Newsletter

Contact(s): Donald Peterson, Director
Computer Center
North Dakota State University
Fargo, ND 58102
(701) 237-8685

University of North Dakota

Reasons for Nomination: Offers academic computing state-wide to public schools in remote areas.

Enrollment: 8,500 Total **Annual Users:** 3,000

Other Users: Three state colleges; 14 state high schools (mostly different schools each year); two Air Force Institute of Technology programs at air bases in North Dakota.

Illustrative Applications: Materials in MATHEMATICS, BIOLOGY, CHEMISTRY, PHYSICS, SOCIAL SCIENCES and business/vocational EDUCATION.
Materials for games and simulations.

Computer(s): IBM 370/135; 3 DEC PDP 8; DEC PDP 12

Terminals: 25 interactive

Public Information: Brochures; UND Computer Center, Institute for Computer Use in Education: Newsletters; Computer Center notes, Higher Education Computer Network

Contact(s): Gene A. Kemper, Director
Institute for Computer Use in Education
University of North Dakota
Grand Forks, ND 58202
(701) 777-3171

The College of Wooster

Reasons for Nomination: Juniors and seniors required to do an independent study project, making heavy use of computers; customary network affords use of wide range of computing resources.

Enrollment: 2,000 Total **Annual Users:** 400

Illustrative Applications: Use of SPSS in batch mode in SOCIAL SCIENCES.
Simulations in ECONOMICS.
Data analysis in CHEMISTRY.
Interdepartmental COMPUTER SCIENCE program.

Computer(s): CDC 1700 used as terminal to CDC 6500 and CDC Cyber/73 at Battelle Columbus Laboratories; member of BECUN (Battelle Educational Computer users network); microcomputer in physics department PDP 11 in chemistry department

Terminals: 6 interactive; 1 remote batch

Public Information: Booklet describing network.

Contact(s): E. Carl Zimmerman, Director of Academic Computer Services
The College of Wooster
Wooster, OH 44691
(216) 264-1234

Denison University

Reasons for Nomination: Academic computing reaches seventy-five percent of student body; computing literacy a primary goal; easily accessible, free computing facility; academic computing since 1964.

Enrollment: 2,200 Total **Annual Users:** 1,600 1,700

Illustrative Applications:
Graphics (Tektronix) terminals to model physical phenomena in PHYSICS.
CMI system used at college lower division level for testing in CHEMISTRY.
All courses in ECONOMICS use simulations to model real-world interactions such as firms in small markets.

Computer(s): DEC PDP 11/45

Terminals: 32 interactive

Contact(s):
Jeffrey S. Jalbert, Director
Computer Center
Denison University
Granville, OH 43023
(614) 587-0810

Heidelberg College

Reasons for Nomination: Open shop environment; student programming and hardware modifications; special programs for high school students.

Enrollment: 950 Total **Annual Users:** 100

Other Users: One high school; one 2-year college.

Illustrative Applications:
Programming, simulations, numerical analysis, and graphics in COMPUTER SCIENCE.
Graphics, data analysis in PHYSICS.
Computation, data bases, data analysis, and graphics in BIOLOGY.
Numerical analysis in MATHEMATICS and STATISTICS.

Computer(s): Varian V-72; DEC PDP 11; Tektronix 40/51; Altair microcomputer

Terminals: 8 interactive; 1 remote batch

Contact(s):
Martin Reno, Director
Computer Center
% Mike Martin
Heidelberg College
Tiffin, OH 44883
(419) 448-2196

Oberlin College

Reasons for Nomination: Exceptional financial support and computer facilities for small liberal arts school; computing literacy a major goal; spectrum of liberal arts applications.

Enrollment: 2,678 FTE **Annual Users:** 1,200

Illustrative Applications:
Electronic music generation in MUSIC.
Experiments in behavior genetics and perception in PSYCHOLOGY.
Introduction logic course in PHILOSOPHY.

Computer(s): Xerox Sigma 9

Terminals: 25 interactive; 1 Tektronix 4013

Public Information: Monthly newsletter; user manuals for different packages

Contact(s):
Marc M. Solomon, Acting Director
Computing Center
Oberlin College
Oberlin, OH 44074
(216) 775-8290

The Ohio State University

Reasons for Nomination: Developer of computer-assisted instruction materials for many years; academic computer use amounting to 75,000 hours per annum.

Enrollment: 50,000 Total **Annual Users:** 8,000

Illustrative Applications:
CMI system used for diagnostic testing and prescriptions in BIOLOGY, CITY AND REGIONAL PLANNING, and LANDSCAPE ARCHITECTURE.
Tutorial and problem-solving assistance for undergraduate and graduate GENETICS students.
Introductory logic course in PHILOSOPHY used by 800-900 students per quarter.
Patient simulations in VETERINARY MEDICINE.

Computer(s): IBM 370/158

Terminals: 175 interactive

Public Information: Quarterly newsletter; application descriptions; CAI User's Manual

Contact(s):
Keith A. Hall, Director
Computer Based Education
The Ohio State University
112 West Hall, 1050 Carmack Road
Columbus, Ohio 43210
(614) 422-9821

Ohio Wesleyan University

Reasons for Nomination: Open shop with terminals available at all times; development of computer-oriented calculus textbook.

Enrollment: 2,250 Total **Annual Users:** 750

Illustrative Applications: Simulation models in ZOOLOGY.
Programming and computation in MATHEMATICS.
Programming, tutorials, and simulations in PHYSICS.
Statistical analysis in ECONOMICS, POLITICS, and GOVERNMENT, PSYCHOLOGY, and SOCIOLOGY.

Computer(s): DEC PDP 11/70

Terminals: 35 interactive (4 of these are graphics terminals)

Contact(s): Harold Wiebe, Director
Academic Computing
Ohio Wesleyan University
Delaware, OH 43015
(614) 369-4431, Ext. 900

Otterbein College

Reasons for Nomination: Most applications are batch mode; test generation; development of specialized punch test answer card; generation of individualized homework assignments in mathematics and physics.

Enrollment: 1,200 Total **Annual Users:** 600

Other Users: Local school district.

Illustrative Applications: Test data banks for LIFE SCIENCE, CHEMISTRY, PHYSICS, RELIGION, LANGUAGES, ENGLISH, MATHEMATICS, and HOME ECONOMICS.
Simulations in STATISTICS.
Use of University of Michigan's EXPERSIM simulation package in PSYCHOLOGY.
Data analysis, simulation, and gaming in POLITICAL SCIENCE.

Computer(s): CDC Cyber 73, CDC 6500 Battelle Columbus Laboratory's CDC 6500; BECUN (Battelle Educational Computers Users Network)

Terminals: 3 interactive; 1 remote batch

Public Information: Booklet describing network

Contact(s): Roger Wiley, Director
Data Processing
Otterbein College
Waterville, OH 43081
(614) 890-3000, Ext. 117

University of Akron

Reasons for Nomination: Model CAI program; student performance data in a spectrum of courses; serves lower-middle class population, large CAI center with over 25 faculty participation.

Enrollment: 20,000 FTE

Other Users: Elementary and secondary schools in Akron area.

Illustrative Applications: CAI in ACCOUNTING, CHEMISTRY, COMPUTER SCIENCE, ENGLISH, MATHEMATICS, PSYCHOLOGY, READING, STATISTICS, others.
Modes of computer use include tutorials, drills, testing, problem-solving.

Computer(s): IBM 370/158; DEC PDP 11/30

Terminals: 60 interactive

Public Information: IBM brochure "Computer Assisted Instruction at the University of Akron."

Contact(s): John J. Hirshbuhl, Director
Computer Assisted Instruction Center
University of Akron
Akron, OH 44325
(216) 375-7781

University of Cincinnati

Reasons for Nomination: Usage quadrupled over last 4 years; academic computing for over 12 years; teacher involvement and student training specifically in the areas of Pathology, German, Mathematics and Remedial Reading.

Enrollment: 38,000 Total **Annual Users:** 7,000
26,000 FTE

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Other Users: Miami University of Ohio, 3,000 and several hundred high school students.

Illustrative Applications: Extensive freshman remedial reading.
Drill and practice program.
A drill and practice program in Algebra.

Computer(s): Amdahl 470 V/6

Terminals: 200 interactive; 10 remote batch

Public Information: "Spider or Fly" (brochure)

Contact(s): Robert R. Caster, D.C.SS.
Assistant Vice President for Business Affairs
University of Cincinnati
231 Bethesda Avenue
Cincinnati, OH 45267
(513) 475-5069

Cameron University

Reasons for Nomination: Academic computing since 1966; computing required of all business students; data processing courses with small classes (10-20 students); hands-on experience.

Enrollment: 5,000 Total **Annual Users:** 250
3,600 FTE

Illustrative Applications: Business DATA PROCESSING.
All business students learn BASIC.
Problem-solving in PHYSICAL SCIENCES.
Management games in BUSINESS.
Test grading in NURSING.
FORTRAN, COBOL, and RPG programming in DATA PROCESSING.

Computer(s): HP 3000

Terminals: 7 interactive; 1 remote batch; 1 graphic

Contact(s): Dale Sare, Director of Data Processing
Roy Byrd, Chairman of Technical Education Department
Cameron University
2800 W. Gore
Lawton, OK 73505
(405) 248-2200, Ext. 64 or 47

Central State University

Reasons for Nomination: Rapid growth over a 3-year period; usage increased over 5 times with increased accessability to batch facilities and time-sharing terminals; faculty initiation of CAI in Psychology Department.

Enrollment: 13,500 Total **Annual Users:** 1,700

Other Users: 40 students from area high school.

Illustrative Applications: Student programming in COMPUTER SCIENCE.
Drills in PSYCHOLOGY.
Simulations in BUSINESS.
Student programming in MATHEMATICS, BIOLOGY and PSYCHOLOGY.

Computer(s): IBM 360/40; DEC PDP 11/45

Terminals: 33 interactive

Public Information: Brochure on computer science program

Contact(s): Ardoth H. Wilson
Academic Computing Coordinator
Central State University
Computer Center
Edmond, OK 73034
(405) 341-2980, Ext. 321

Oregon Institute of Technology

Reasons for Nomination: Computer systems engineering; curriculum combines teaching of computer hardware with programming and software; career-related placement is 92%.

Enrollment: 2,000 FTE **Annual Users:** 1,600

Illustrative Applications: Computer use in ENGINEERING, PROGRAMMING LANGUAGES, and MICROCOMPUTERS.

Computer(s): Harris 7

Terminals: 9 interactive

Contact(s): John Yarbrough, Assistant Professor of Electronics
Oregon Institute of Technology
Kalamath Falls, OR 97601
(503) 882-6321

Oregon State Universities

Reasons for Nomination: Every department uses computer; seventy-five percent of instructional use is in 250 courses that do not teach programming; documentation of instructional materials; easy-to-use system; large number of users with no computing background.

Enrollment: 16,000 FTE **Annual Users:** 14,000

Other Users: State colleges, community colleges, and local high schools.

Illustrative Applications:
COMPUTER SCIENCE curriculum (including PhD degree program).
Problem-solving and simulations in INDUSTRIAL, GENERAL, and CHEMICAL ENGINEERING.
Heavy use by STATISTICS department.
Introductory course in STATISTICS taught via computer.
Interactive graphics in NUMERICAL ANALYSIS, OCEANOGRAPHY, PHYSICS.
Simulations in BUSINESS.

Computer(s): CDC 3300; CDC Cyber 73

Terminals: 250 interactive; 2 remote batch

Public Information: Computer center newsletter

Contact(s):
Jo Ann Baughman, Manager of Academic Computing Services
Curt Cook, Chairman Computer Science
Cris Calligan, Assistant Director of Instructional and Research Computing
Computer Center
Oregon State Universities
Corvallis, OR 97331
(503) 754-2161 (Baughman)
(503) 754-3273 (Cook)
(503) 754-2494 (Calligan)

Bucknell University

Reasons for Nomination: Academic time-sharing offers a wide variety of services for a school with only 3,000 students.

Enrollment: 3,000 FTE **Annual Users:** 1,800 est.

Other Users: Five local high schools

Illustrative Applications:
Control system simulations in undergraduate COMPUTER SCIENCE program.
Computational programs used in ENGINEERING such as the Finite Element method.

Computer(s): Xerox Sigma 7

Terminals: 30 interactive; 1 graphics

Public Information: FRCC (Computer Center newsletter)

Contact(s):
Ben Douglas Gay, Director of Computer Activities
Freas-Rooke Computer Center
Bucknell University
Lewisburg, PA 17837
(714) 524-1436

Carnegie Mellon University

Reasons for Nomination: Computer used in every discipline; creating new environment to reach out to the unsophisticated user; early leader in computer science education; first computer center formed in 1956.

Enrollment: 3,500 FTE **Annual Users:** 3,000
undergraduates
1,000 FTE graduates

Other Users: 5 local colleges; 3 local high schools.

Illustrative Applications:
COMPUTER SCIENCE department with comprehensive curriculum.
Artificial intelligence laboratory.
Self-paced learning.
Free educational computing.
Design work in the ARCHITECTURE department.
Statistical analysis in the SOCIAL SCIENCES.
Automated text processing.
CAI in communications skills center.

Computer(s): 3 DEC PDP 10; UNIVAC 1108; DECsystem 20/40; DECsystem 20/50; 2 DEC PDP 11/45; IBM 360/67; minicomputers in various departments

Terminals: 400 interactive

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Public Information: Computation Center Newsletter (monthly)

Contact(s): Frances Bardello Craig, Director
User Services
John W. McCredie, Jr., Vice Provost
of Information Services
Computation Center
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213
(412) 578-2638

Indiana University of Pennsylvania

Reasons for Nomination: Systems analysis program one of few in the country; open, accessible computing facilities.

Enrollment: 11,300 Total **Annual Users:** 3,500

Other Users: 20 other colleges; 15 high schools.

Illustrative Applications:
Graphics in PHYSICS.
VOTRAX voice response unit which emulates speech defects in SPEECH.
Language architecture using a micro-data 1600 minicomputer in COMPUTER SCIENCE.
COMPUTER SCIENCE program specializing in systems analysis.

Computer(s): Xerox Sigma 6

Terminals: 50 interactive; 3 remote batch

Public Information: User's Guide

Contact(s): Jack Nold, Director
Computer Center
Indiana University of Pennsylvania
Straight Hall, Indiana University
Indiana, PA 15701
(412) 357-4000

Millersville State College

Reasons for Nomination: Seventy percent of graduates are exposed to computing; computing literacy of education majors; wide spectrum of instructional applications; development of curricular materials.

Enrollment: 6,000 Total **Annual Users:** 2,000
5,800 FTE

Other Users: Local high schools and colleges.

Illustrative Applications:
Simulations in AMERICAN HISTORY used by several hundred students annually.
Interactive statistical analysis package designed for use by freshmen in PSYCHOLOGY.
B.S. program in COMPUTER SCIENCE.
Weather forecasting and map drawing in EARTH SCIENCES.
Drills and problem-solving in MATHEMATICS.
Simulations in URBAN STUDIES.
On-line searches of ERIC document data bases.
Norming of pre-school inventory data for Title I Projects in Pennsylvania.

Computer(s): UNIVAC 70/3

Terminals: 40-50

Public Information: "Academic Program Abstracts"
"User Guide"

Contact(s): Thomas Houser, Director
Computer Services
Millersville State College
Millersville, PA 17551
(717) 872-5411

Moravian College

Reasons for Nomination: Full integration in mathematics department; excellent computing facilities; 2-track (programming and editing) introductory computer science course.

Enrollment: 1,300 Total **Annual Users:** 380

Illustrative Applications:
Computer literacy in introductory COMPUTER SCIENCE course.
Many languages in advanced COMPUTER SCIENCE program.
Data analysis and graphics in PHYSICS.
Simulation and data analysis in CHEMISTRY.
Programming, testing of theories, simulations, and data analysis in MATHEMATICS and STATISTICS.

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Computer(s): DEC PDP 11/45; minicomputer/microcomputer laboratory; access to CDC 6400

Terminals: 13 plus 4 on order

Contact(s): Marialuisa McAllister, Associate Prof.
Mathematics and Computer Science
Moravian College
Bethehem, PA 18017
(215) 865-0741

Slippery Rock State College

Reasons for Nomination: Interactive and remote batch problem-solving facilities support a wide range of academic studies; individualized instruction via CAI.

Enrollment: 5,398 Full time **Annual Users:** 750-850

Other Users: Terminals in schools, K-12, in ten neighboring school districts.

Illustrative Applications: Programming, data bases and structure, and graphics in COMPUTER SCIENCE.
Computerized Vocational Information System (CVIS) for career development.
Simulation, test generation and problem-solving in PHYSICS.
Simulation and gaming in ECONOMICS and POLITICAL SCIENCE.

Computer(s): IBM 370/135; IBM System 7; Data General NOVA 3/12

Terminals: 50 interactive; 1 remote batch; 1 graphics

Public Information: "Multi-Use of the IBM System/370 at Slippery Rock State College," IBM Application Brief, Manual No. GK 20-1044-0, Order from IBM

Contact(s): Paul A. Stieman, Director of Computer Services
200 Maltby Center
Slippery Rock State College
Slippery Rock, PA 16057
(412) 794-7326

University of Pittsburgh

Reasons for Nomination: Achieved 800% more computing resources for same budget as 1970; installed a microwave time-sharing remote batch network in 1972; development center has produced large number of CAI units used by a number of colleges and universities; computer used in nearly every subject area at the University; long history of academic computing (21 years).

Enrollment: 27,000 Total **Annual Users:** 8,000

Illustrative Applications: Extensive computer-based CAI courses in CHEMISTRY including a user guide and textbook. 300 students per semester use this course.
Use of SPSS statistical package in SOCIAL SCIENCE (this university is the distributor for SPSS for all users of DECsystem-10s).

Computer(s): 2 DECsystem-10

Terminals: 72 (public); 150 (private, controlled by departments for their students.)

Contact(s): Raff Ellis, Director
University of Pittsburgh
Computer Center
600 Epsilon Drive
Pittsburgh, PA 15238
(412) 624-6355

University of Scranton

Reasons for Nomination: Small college with comprehensive program in computer science and data processing; concepts introduced early in curriculum; high placement of graduates in job market and graduate school.

Enrollment: 2,500 Total **Annual Users:** 600

Illustrative Applications: Structured programming in introductory COMPUTER SCIENCE.
Data structures taught in COMPUTER SCIENCE to sophomores.

Computer(s): Xerox Sigma 6

Terminals: 17 interactive

Contact(s): John Beidler, Director
Computer Science Program
University of Scranton
Scranton, PA 18510
(717) 961-7446

West Chester State College

Reasons for Nomination: CMI system developed by faculty and used in many departments, particularly mathematics, chemistry, and education; statistical package developed by faculty.

Enrollment: 6,750 undergraduate
950 graduate
Annual Users: 700

Other Users: 12 local school districts (1,000 users); 3 community colleges.

Illustrative Applications: SPSS in SOCIOLOGY.
Languages and data bases in COMPUTER SCIENCE.
Interactive statistical package used for graduate research.
CAI in FOREIGN LANGUAGE.

Computer(s): HP 2000C; Xerox 560

Terminals: 75 Xerox; 32 HP

Contact(s): Sam Hoffman, Director of Computer Services
West Chester State College
High and Rosedale Aves.
West Chester, PA 19380
(215) 436-2234 or 2828

Brown University

Reasons for Nomination: Twenty-two year history of academic computing; free access to all students; spectrum of applications; emphasis on software engineering in computer science curriculum.

Enrollment: 7,000 - 8,000
Total
Annual Users: 3,500 - 4,000

Illustrative Applications: Problem-solving in SOCIOLOGY, APPLIED MATHEMATICS, ENGLISH, PHYSICS, LINGUISTICS, COMPUTER SCIENCE.

Computer(s): IBM 360/67; IBM 370/138

Terminals: 50 interactive; sophisticated graphics system

Public Information: "Overview of Computing Facilities" (brochure) "Graduate Studies in Applied Mathematics and Computer Science" (brochure); Computer Center Notices (Available)

Contact(s): Walter Freiberger, Chairman
Applied Mathematics Division
Brown University
Box F
Providence, RI 02912
(401) 831-5037

Bryant College

Reasons for Nomination: Students encouraged to develop applications; mandatory computer programming course for all freshmen.

Enrollment: 3,850 FTE
Annual Users: 1,200

Illustrative Applications: COMPUTER PROGRAMMING for all freshmen.
Programming simulations, and statistical analysis in BUSINESS.
Numerical analysis in MATHEMATICS.

Computer(s): IBM 1130; Basic Time-sharing Inc. BTI 4000

Terminals: 35 interactive; includes administrative

Contact(s): Charles Snyder, Director
Computer Center
Bryant College
Smithfield, RI 02917
(401) 231-1200

University of Tennessee, Chattanooga

Reasons for Nomination: Administrative, local community, and faculty support of academic computing program; impact on many areas of instruction.

Enrollment: 4,800 FTE
Annual Users: 2,000

Illustrative Applications: Conduit materials in introductory PHYSICS, CHEMISTRY, BIOLOGY, SOCIAL SCIENCES, and BUSINESS.
Thirty units for pre-medical students in CHEMISTRY.
Tutorial lab in MUSIC.
Interactive data analysis in BUSINESS.
Remedial CAI ENGLISH.
Statistical analysis in PSYCHOLOGY and CHEMISTRY.
Problem-solving in ENGINEERING and MATHEMATICS.
MATHEMATICS Laboratory for CMI.
Various simulations, file handlers and editors.

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Computer(s): HP 2000; HP 3000; UTK's DEC PDP 10 and IBM 360/65

Terminals: 40 interactive; 1 remote batch—of these 1 terminal includes I plotter, 2 graphics

Public Information: 1976-1977 Annual Report on Academic Computing. Computing Newsletter (available at cost for non-UTC users)

Contact(s): Lloyd Davis, Director
Academic Computing Services
University of Tennessee at Chattanooga
Chattanooga, TN 37401
(615) 755-4387

University of Tennessee, Martin

Reasons for Nomination: Majority of academic departments now using the computer; growing program; free access to computer for students and faculty.

Enrollment: 5,000 Total **Annual Users:** 2,000
4,500 FTE

Other Users: Local high school

Illustrative Applications: BUSINESS students all learn programming.
COMPUTER SCIENCE department with students learning RPG, COBOL, FORTRAN and BASIC.
CAI in CHEMISTRY, GEOLOGY and GEOGRAPHY.
Lab data gathering and analysis in PHYSICS, CHEMISTRY, and AGRICULTURE.
Simulations in BIOLOGY.

Computer(s): DEC PDP 11/45, access to IBM 360/65

Terminals: 32 interactive

Public Information: Information available

Contact(s): James Westmoreland
Director of Computer Services
University of Tennessee at Martin
Martin, TN 38238
(901) 587-7999

East Texas State University

Reasons for Nomination: Well-established 10 years experience in the development of a CAI operation; continuous and steady growth of hardware and software over the past years.

Enrollment: 10,000 Total **Annual Users:** 3,800

Illustrative Applications: Tutorials in introductory PSYCHOLOGY for lower division students.
Tutorials in introductory STATISTICS serve as a review for a qualifying examination.

Computer(s): IBM 360/50

Terminals: 14 interactive; 1 remote batch

Contact(s): Lowell Ballew, Director of The Computer Center
East Texas State University
Commerce, TX 75428
(214) 468-2929

Rice University

Reasons for Nomination: First-class resource center for a small university; high level of expenditure per student ($90/student/year); more than half of students are involved with computers.

Enrollment: 3,648 Total **Annual Users:** 2,000

Illustrative Applications: Three self-paced courses in MATHEMATICS, SCIENCE, and ENGINEERING with 10 laboratory computing programs.
SHAZAM, a statistical analysis package, used in ECONOMICS.
Course in compiler writing in MATH SCIENCES.

Computer(s): IBM 370/155

Terminals: 12 interactive

Contact(s): Priscilla Houston, Acting Director
ICSA
Rice University
Houston, TX 77001
(713) 527-8101

Southwest Texas State University

Reasons for Nomination: Strong institutional support for instructional computing accessibility of computer to students.

Enrollment: 13,000 **Annual Users:** 2,000

Illustrative Applications: Computer-generated POLITICAL SCIENCE tests, ENGLISH and PSYCHOLOGY skill enforcement series, CHEMISTRY and BUSINESS simulation and modeling.

Computer(s): DEC PDP 10

Terminals: 50 terminals

Public Information: Computer Center Newsletter

Contact(s): Henry McEwen, Director
Computer Center
Southwest Texas State University
San Marcos, TX 78666
(512) 245-2362

Texas A&I University

Reasons for Nomination: Computer science department since 1964 without external funding; variety of disciplines included in computer curriculum.

Enrollment: 7,000 Total **Annual Users:** 1,000

Illustrative Applications: SPSS used in SOCIAL SCIENCES.
Genetics simulation in AGRICULTURE.
COMPUTER SCIENCE and EDP instruction.
Circuit analysis in ELECTRONICS.

Computer(s): IBM 360/50

Terminals: 18 interactive; 1 remote batch; 1 plotter

Contact(s): Herbert R. Haynes
Texas A&I University
Campus Box 185
Kingsville, TX 78363
(512) 595-2401

Texas A&M University

Reasons for Nomination: Pioneer in computer science education; every college using the computer for instruction; faculty training; variety of applications available; free time for students to use system each day.

Enrollment: 28,000 FTE **Annual Users:** 14,000

Other Users: Four universities, 5 state agencies, Army depot, 3 agricultural experiment stations.

Illustrative Applications: All major languages taught in COMPUTER SCIENCE curriculum.
Applications used heavily by departments of ENGINEERING, MATHEMATICS, PHYSICS, CHEMISTRY, BUSINESS and STATISTICS.

Computer(s): Amdahl 470, DEC PDP 11/20

Terminals: 104 interactive; 2 remote batch

Public Information: Brochure available

Contact(s): Dan Drew, Department Head
Industrial Engineering & Computing Science
William C. Lafield, Jr., Assistant Director
Data Processing Center
Texas A&M University
College Station, TX 77843
(713) 845-5531 (Dr. Drew)
(713) 845-4211 (Mr. Lafield)

Trinity University

Reasons for Nomination: Private school with most departments using computers; student access to terminals; corporation formed to operate computer center; APL primary teaching language; seminars to promote use of computers.

Enrollment: 3,400 Total **Annual Users:** 1,700

Other Users: Local businesses, schools, and governmental agencies.

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Illustrative Applications: Program for bachelors and masters in COMPUTING and INFORMATION SCIENCES.
Data collection and statistical analysis in PHYSICS, CHEMISTRY, PSYCHOLOGY, SOCIOLOGY, and POLITICAL SCIENCE.
Problem-solving in ENGINEERING.
CAI in BIOLOGY.
ENGLISH and FOREIGN LANGUAGE drills.
MARCHIVE Library System

Computer(s): IBM 370/155; TI 960, 2 Datapoint 2200, 14 microcomputers

Terminals: 70 interactive

Contact(s): John Howland, Chairman
Computing and Information Sciences
Trinity University
715 Stadium Drive
San Antonio, TX 78284
(512) 736-7236

University of Houston - College of Technology

Reasons for Nomination: Unique educational program with minicomputers in technical education; documented gains in student achievement in mathematics.

Enrollment: 3,600 Total **Annual Users:** 3,600

Illustrative Applications: CAI course in digital CIRCUIT DESIGN.
Course in Computer-aided graphics.

Computer(s): HP 2000; HP 3000

Terminals: 100 (8 graphics)

Contact(s): George McKay, Head of Computer Activities for College of Technology
University of Houston - College of Technology
Houston, TX 77004
(713) 749-1500

University of Texas, Austin

Reasons for Nomination: Computer facilities a resource like the library; service orientation for entire academic community; consulting staff available to faculty and students; workshops for faculty and students; established office to support faculty and students using the computer for instruction; development of curricular material.

Enrollment: 40,000 Total **Annual Users:** 20,000

Other Users: Local high schools (10); 1 private high school, 8 Texas colleges and universities, 5 out-of-state colleges and universities, 20 Texas state agencies.

Illustrative Applications: Problem-solving tool in ARCHITECTURE, BUSINESS, CHEMISTRY, ENGINEERING, MATHEMATICS, PHYSICS, SOCIAL SCIENCES, ZOOLOGY.
Testing in PSYCHOLOGY simulations in CHEMISTRY, BUSINESS, and NURSING.
Tutorials and drill in CHEMISTRY, ENGLISH, GEOLOGY and CLASSICS.
Graphics applications in ENGINEERING.
COMPUTER SCIENCE department offering PhD.

Computer(s): CDC 6600-6400; DECsystem-10; Data General Nova 840; Xerox 930; Sigma 5

Terminals: 400 interactive; 20 remote batch

Public Information: Computation Center Newsletter (bi-weekly); brochure available

Contact(s): George Culp, Assistant Director for Instructional Computing
Charles Warlick, Director of Computing Center
University of Texas at Austin
Austin, TX 78712
(512) 471-7202 (Dr. Culp)
(512) 471-7242 (Dr. Warlick)

University of Texas, El Paso

Reasons for Nomination: Quality of service for users; monthly workshops for faculty; local development of CAI lessons; organizing computer science department.

Enrollment: 15,000 Total **Annual Users:** 3,000
12,500 FTE

Other Users: Local high school students.

Illustrative Applications:
Programming and problem analysis for ENGINEERING students.
Analysis of laboratory experiments and CAI in CHEMISTRY and BIOLOGY.
Computation and problem-solving in MATHEMATICS.
School of EDUCATION using statistical packages for student evaluation.

Computer(s): IBM 360/65

Terminals: 43 interactive

Public Information: Computer Center Newsletter.

Contact(s):
Sam Yildirim, Dir. of Computer Center
Bell Hall
University of Texas at El Paso
El Paso, TX 79968
(915) 747-5000

University of Texas Health Science Center at Dallas

Reasons for Nomination: Computing woven into the fabric of the institution; goal to produce computer-using health professionals and scientists; computing power for users via interactive computing; 5-year growth from few hours connect time/month to 25,000 user connect hours/month.

Enrollment: 1,250 Total **Annual Users:** 700
750 medical,
270 graduate
230 undergraduates full time

Other Users: Univ. of Texas–Dallas, Univ. of Texas–Arlington, Univ. of Texas–Permian Basin, Texas Woman's Univ., Texas Eastern Univ., East Texas Chest Hospital.

Illustrative Applications:
CAI in a variety of disciplines including BIOCHEMISTRY, PHYSIOLOGY, ANATOMY, GENETICS, IMMUNOLOGY.
Question data bases in PHARMACOLOGY and CHEMISTRY.
Clinical problem-solving.
Computer-based test generation and scoring in basic science and clinical disciplines.
Programming as an elective.
Text processing for manuscript preparation.

Computer(s): DECsystem-10

Terminals: 150 interactive; DEC GT42-A and Tektronix 4012 graphics terminals

Public Information: Information available

Contact(s):
David Mishelevich, Chairperson
Dept. of Medical Computer Science
Director, Medical Computing Resources Center
Juanice Welsh, Educational Computing Coordinator
Medical Computing Resources Center
University of Texas Health Science Center at Dallas
5323 Harry Hines Blvd.
Dallas, TX 75235
(214) 688-3681

West Texas State University

Reasons for Nomination: Small regional university with a successful program in computer information systems; high placement rate and high salary levels for graduates of the program; industry endorsement of program.

Enrollment: 6,500 Total

Illustrative Applications:
Career-oriented programs in Computer Information Systems (CIS).
Computing courses required of all business majors.
Large number of CIS minors.
CIS coursework by geology, mathematics, chemistry and business majors.

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Computer(s): DECsystem-10
Terminals: 25 interactive; 1 remote batch
Public Information: CIS Brochure
Contact(s): Roy B. Martin, Acting Head
CIS Department, School of Business
West Texas State University
Canyon, TX 79016
(806) 656-2122

Brigham Young University

Reasons for Nomination: Developed TICCIT system.
Enrollment: 25,000 Total **Annual Users:** 1,000
Other Users: Junior high schools, commercial users.
Illustrative Applications: ENGLISH grammar and composition.
ENGLISH as a second language.
Critical reading.
MATHEMATICS drill for pre-calculus.
Computer(s): 2 Data General Nova 800; IBM 360; DEC PDP 10
Terminals: 32 interactive
Public Information: Technical Report series.
Contact(s): Monte Shelley
Victor Bunderson
Brigham Young University
3126 HBLL
Provo, UT 84602
(801) 374-1211, Ext. 2647

Middlebury College

Reasons for Nomination: Redistribution site for BMDP statistical package; high level language implementation (PASCAL, ALGOL 68) open facilities.
Enrollment: 1,850 Full time **Annual Users:** 350
Illustrative Applications: Introductory programming.
Programming, drills, and demonstrative computing aids in MATHEMATICS.
Programming, lab data analysis in PHYSICS, GEOLOGY, BIOLOGY, and CHEMISTRY.
Statistical analysis in POLITICAL SCIENCE, SOCIOLOGY, and ANTHROPOLOGY.
Computer(s): DEC PDP 11/45; DEC PDP 11/V03 in physics
Terminals: 11 interactive
Contact(s): Jim Krupp, Director Academic Computation
Middlebury College
Voter Hall Computer Center
Middlebury, VT 05753
(802) 388-7977

Old Dominion University

Reasons for Nomination: Recent rapid growth in computer use in 120 subject areas; development of instructional technology techniques and materials.
Enrollment: 10,800 Full time **Annual Users:** 6,000
Illustrative Applications: CMI system under development to be used by SCIENCE departments.
Computer(s): DECsystem-10
Terminals: 120 interactive
Contact(s): Carl Russ, Director
Computer Center
Old Dominion University
Norfolk, VA 23508
(804) 489-6265

Virginia Polytechnic Institute and State University

Reasons for Nomination: Large academic computer science program; 75 academic departments use computers for instruction and research; several departments involved in minicomputer laboratory automation; large-scale campus interactive time-sharing network.
Enrollment: 19,000 FTE **Annual Users:** 10,000

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Other Users: Colleges and universities in Virginia.

Illustrative Applications: Several hundred students in academic COMPUTER SCIENCE program.
Laboratory automation in ENGINEERING, ARCHITECTURE, BIOCHEMISTRY, GEOPHYSICS, METEOROLOGY.
Microcomputer teaching station for use in CHEMISTRY and CHEMICAL ENGINEERING.
Programming instruction for all SCIENCE and ENGINEERING freshmen.

Computer(s): 2 IBM 370/158; 40 minicomputers

Terminals: 180 interactive; 8 RJE

Public Information: Monthly newsletter "Computing Center Log"; User Guides, "Volume I Introduction to Computing."

Contact(s): O.L. Gibson, Director, Computer Center
John Heafner, Associate Director for Academic Computing
Virginia Polytechnic Institute and State University
Burruss Hall
Blacksburg, VA 24061
(703) 951-6381

The Evergreen State College

Reasons for Nomination: Institution in existence for six years; academic computing used since its inception; interdisciplinary structure with no departments; computer system programmed by students; student-run academic computing facility; free access policy for student users.

Enrollment: 2,500 Full time **Annual Users:** 750

Other Users: Three high schools; five community colleges; state agencies.

Illustrative Applications: Programming in COMPUTER SCIENCE.
Computation, tutorials, drills, simulations, graphics and problem-solving in MATHEMATICS, STATISTICS, and SCIENCE.
Writing analysis in ENGLISH.

Computer(s): HP 2000; microprocessors, access to IBM 370/158, and CDC 6600.

Terminals: 30 interactive including graphics

Public Information: Handbook of computer services; academic computing brochure

Contact(s): John O. Aikin, Director
Computer Services
The Evergreen State College
Olympia, WA 98505
(206) 866-6232

University of Washington at Seattle

Reasons for Nomination: Low-cost computing; wide range of applications, well-established program.

Enrollment: 36,000 Total **Annual Users:** 13,000

Illustrative Applications: HEALTH SCIENCES examination simulator.
Simulations in CHEMISTRY and MARINE BIOLOGY.
Data base management for the SOCIAL SCIENCES.
Simulation and problem-solving in ECONOMICS and ENGINEERING.

Computer(s): CDC 6400; CDC Cyber 7[illegible]; DEC PDP 10; HP 2000 Access

Terminals: 200 interactive; 20 remote batch

Public Information: Computer Center Newsletter; Annual Reports

Contact(s): Robert Gillespie, Vice Provost for Computing
University of Washington
Seattle, WA 98195
(206) 543-6070

Western Washington University

Reasons for Nomination: Economical system with low operating costs supports a variety of CAI applications; PILOT programming language merged with BASIC.

Enrollment: 9,000 Total **Annual Users:** 3,000

Other Users: Several high schools.

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Illustrative Applications: Remedial MATHEMATICS instruction.
SOCIAL SCIENCE simulation of the Cuban missile crisis.
Drill and practice in SPANISH LANGUAGE.
Lab simulation in CHEMISTRY.
Conversion of IBM coursewriter materials to PILOT.

Computer(s): IBM 360; 2 Interdata 7/32

Terminals: 50 interactive

Contact(s): Melvin Davidson, Director
Computer Center
Western Washington University
Bellingham, WA 98225
(206) 676-3361

Whitworth College

Reasons for Nomination: Locally-developed CAI as the language allows course development in any subject area; random-access slide projection system.

Enrollment: 1,200 Total **Annual Users:** 120

Other Users: Local high school.

Illustrative Applications: Modern LANGUAGE review and tutorial using the CAI system.
Tutorials in MUSIC history.
Computer-generated tests in PSYCHOLOGY.
Tutorials in Organic CHEMISTRY.

Computer(s): DEC PDP 11/45

Terminals: 16 interactive

Contact(s): Robert McCroskey, Director
Computer Center
Whitworth College
Hawthorne Street
Spokane, WA 99251
(509) 466-1000

West Virginia Wesleyan College

Reasons for Nomination: Computer science curriculum; in-house development of modeling curriculum.

Enrollment: 1,700 Full time **Annual Users:** 400

Other Users: Two neighboring small colleges.

Illustrative Applications: Introductory COMPUTER SCIENCE course teaches students to use computer in all disciplines.
COMPUTER SCIENCE curriculum for associate (2-year) degree, 4-year minor, and 4-year major.

Computer(s): NCR Century 101; 3 microprocessors; minicomputer on order

Terminals: 4 interactive

Contact(s): Ronald H. Klausewitz, Director
Computer Center
West Virginia Wesleyan College
Buckhannon, West VA 26201
(304) 473-8008

Lawrence University

Reasons for Nomination: Development and dissemination of software packages designed for student use, including statistical package COSAP, text editors TECO and SITAR, and XBASIC precompiler; spectrum of applications and curriculum development.

Enrollment: 1,350 FTE **Annual Users:** 500

Illustrative Applications: Student research in HISTORY.
Use of CASONOVA, an interactive tutorial statistical package.
Use of COSAP program in SOCIOLOGY and ECONOMICS for data base analysis.

Computer(s): DEC PDP 11/45; IBM 360/44

Terminals: 16 interactive

Public Information: "Computers and Computing at Lawrence University" (booklet)

Contact(s): Michael Hall, Director
Computer Services
Lawrence University
Appleton, WI 54911
(414) 739-3681

University of Wisconsin, La Crosse

Reasons for Nomination: Broad base of campus computer use, including computer science major; support of computing at Wisconsin high schools; first academic computer regional network in Wisconsin; low-cost computer services to rural areas; provide assistance in statewide planning at university level and for public school use.

Enrollment: 8,000 Total **Annual Users:** 4,000

Other Users: 30 high schools, elementary schools, community colleges in Wisc. are connected to the LACE Network.

Illustrative Applications: LACE Network provides computer services over wide geographic area as well as on campus, computer-based testing.
CAI drill/practice in MATHEMATICS.
CAI in SOCIAL SCIENCE.
Computer-assisted CAREER PLANNING.
Textual printed materials.

Computer(s): HP 3000; HP 2000C; HP 2000 Access;

Terminals: 25 on campus, 30 off campus

Public Information: PUNCHLINE

Contact(s): John Storlie, Director
Computer Center
University of Wisconsin at La Crosse
1725 State Street
La Crosse, WI 54601
(608) 784-6050

University of Wisconsin, Madison

Reasons for Nomination: Computer science program and model minicomputer learning laboratory; spectrum of applications; balanced centralized/decentralized facilities; budget supported.

Enrollment: 38,000 Total **Annual Users:** 13,000

Illustrative Applications: Advanced academic COMPUTER SCIENCE program.
COMPUTER SCIENCE courses serving 2000 students.
ENGINEERING computing lab serving 1000 jobs per week batch.
EDUCATION R&D in CAI/CMI.
Problem-solving in CHEMISTRY.
Center for Demography and Ecology.

Computer(s): IBM 370/158; UNIVAC 1110; IBM 370/138; 12 Harris minicomputers; 16 DEC PDP 11; 50 other minicomputers

Terminals: 50 student access plus 200 for research users.

Public Information: MACC User Services Publications
1210 W. Dayton Street
Madison, WI 53706
(608) 262-2054

Contact(s): Richard R. Hughes, Coordinator
Computing Activities
University of Wisconsin at Madison
1500 Johnson Drive
Madison, WI 53706

E.J. Desautels, Assoc. Professor
Computer Science Department
1210 W. Dayton
Madison, WI 53706
(608) 263-1602 (Dr. Hughes)
(608) 262-0620 (Dr. Desautels)

University of Wisconsin, Milwaukee

Reasons for Nomination: Spectrum of computer applications; large amount of administration support.

Enrollment: 26,000 Total **Annual Users:** 5,000

Other Users: Government agencies.

Illustrative Applications: Simulations in ENGINEERING and BUSINESS.
Graphics in ARCHITECTURE and GEOLOGY.
Modeling in STATISTICS.

Computer(s): UNIVAC 1106; DEC PDP 8; IBM 360/50

Terminals: 50 interactive, plus 4 grahpics and plotting

Public Information: Newsletter, CSD Handbook

Contact(s): Fred Ostapik
University of Wisconsin at Milwaukee
EMS EB82, P.O. Box 413
Milwaukee, WI 53201
(414) 963-5371

University of Wisconsin, Superior

Reasons for Nomination: Rapid growth of instructional computing without large staff; local development of computer-based instructional methods.

Enrollment: 2,600 Total **Annual Users:** 250

Other Users: Superior High School.

Illustrative Applications:
DATA PROCESSING and COMPUTER SCIENCE curricula.
CAI in BIOLOGY and CHEMISTRY.
Simulations in BIOLOGY and CHEMISTRY.
Simulations of experiments in PHYSICS.
Statistical analysis in PSYCHOLOGY.
Tests in MASS MEDIA department.
Critical situation simulations in EDUCATION.

Computer(s): DEC PDP 11/70

Terminals: 17 interactive

Public Information: Academic Computing Newsletter

Contact(s):
Daryl Mosier, Coordinator for Instruction Computing
Clint Welker, Director Computer Center
University of Wisconsin—Superior
Superior, WI 54880
(715) 392-8101, Ext 266

COMMUNITY COLLEGES

Southern Junior College of Business

Reasons for Nomination: Successful student job placement; only local institution teaching data processing; exposure to the range of business careers and accounting.

Enrollment: 1,000 Total **Annual Users:** 250

Illustrative Applications: Curriculum emphasizing business applications in DATA PROCESSING.
Procedure programs in ACCOUNTING.

Computer(s): IBM 1401 with cardreader

Terminals: 1 interactive

Public Information: Brochure

Contact(s): James Estep, Data Proc. Mgr.
Southern Junior College of Business
P.O. Box 10584
1724 1st Ave. North
Birmingham, AL 25201
(205) 322-5645

Maricopa County Community College District

Reasons for Nomination: A five-college district with extensive and varied instructional computing; one of two national TICCIT test sites; large computer technology and data processing program; curriculum development by many faculty.

Enrollment: 52,000 Total **Annual Users:** 6,500

Other Users: High schools, colleges

Illustrative Applications: TICCIT ENGLISH.
Test item analysis and test grading in all disciplines.
CAI, drill and practice, in FOREIGN LANGUAGES, MATHEMATICS, ENGLISH, SCIENCES, ELECTRONICS.
Totally student-paced program in data entry courses.

Computer(s): UNIVAC 1106; HP 2000; TICCIT System

Terminals: 90 interactive; 5 RJE

Contact(s): Warren F. Buxton, Computer Tech.
Harry Reiken, Director,
Educational Computing Services
Maricopa County Com. College District
106 East Washington
Phoenix, AZ 85004
(602) 258-7251

Phoenix College

Reasons for Nomination: Ease of use of CAI system; college credit for completion of CAI courses.

Enrollment: 14,000 Total **Annual Users:** 1,200

Illustrative Applications: Remedial and freshman ENGLISH CAI courses for credit.
Beginning, intermediate, and college ALGEBRA by computer for credit.
Graphics in ELECTRONICS.
Applications in NURSING.

Computer(s): Data General Nova 800 and Nova 840

Terminals: 128 interactive

Contact(s): Jim Krocza
Phoenix College
1202 West Thomas Avenue
Phoenix, AZ 85013
(602) 264-2492

Coastline Community College

Reasons for Nomination: Technology-based college without walls.

Enrollment: 20,302/ Semester Total **Semester Users:** 5,000

Illustrative Applications: On-line registration of students through mail.
Computer support for television courses and courses by newspaper.
Test generation; test scoring; student prescriptions; mailing/telephone contact systems.

Computer(s): Coast Community College District's IBM 370/145, and 155

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Terminals: DTC 300S

Public Information: Learning Managers Handbook; Newsletter about telecourse, operations procedures

Contact(s): Bernard Luskin, President
Ed Decker, Dean of Instruction
Charlanne Jelen, Telecourse Operations Coordinator
Coastline Community College
10231 Slater Avenue
Fountain Valley, CA 92708
(714) 963-0811

Diablo Valley College

Reasons for Nomination: Two-year college; faculty committee program development; counseling developmental site for California Career Information System; recently-acquired microcomputer for academic computing; Electronics Department building ten microcomputers.

Enrollment: 13,000 Full Time **Annual Users:** 5,000

Illustrative Applications: Programming in COMPUTER SCIENCE.
Computation, tutorials, and simulations in MATHEMATICS.
Problem-solving and experimental simulation in SCIENCE and ENGINEERING.
Tutorials and drills in ENGLISH.
Student programming in RPG, FORTRAN, COBOL, PL/1.
Use of microcomputer in Oceanography experiment.

Computer(s): HP 2000F, IBM System 3, IBM 370/135, IMSAI 8080

Terminals: 42 interactive

Contact(s): Jim Stubblefield, Chairman
Computer User Committee
Diablo Valley College
321 Golf Club Road
Pleasant Hill, CA 94521
(415) 685-1230

Gavilan Community College

Reasons for Nomination: Physics applications development; student attitudes toward computing as useful tool; recent increase in facilities is encouraging new applications.

Enrollment: 2,600 Total 1,600 FTE **Annual Users:** 100

Other Users: High schools in the college district

Illustrative Applications: Problem-solving and student programming in SCIENCES and ENGINEERING.
General education in computing for students from all disciplines.
Developing remedial MATHEMATICS materials and JOURNALISM applications.

Computer(s): HP 2000 Access

Terminals: 14; Graphics; Plotter

Contact(s): Herbert Peckham, Professor of Natural Science
Gavilan Community College
5055 Santa Teresa Road
Gilroy, CA 95020
(408) 847-1400

Golden West College

Reasons for Nomination: Support to faculty provided by Computer Services Center; computer applications integrated into all curricula and media; faculty support includes faculty fellowship grants; development of curricular materials; staff organization for CAI development.

Enrollment: 11,164 Day 8,165 Night **Annual Users:** 8,000 + Test scoring for all

Other Users: Material shared by Orange Coast and Coastline Colleges

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Illustrative Applications: 1315 units of CAI available.
Computer management of "open entry, open exit" courses, tailored to faculty requirements, includes on-line testing, grading, prescription, recordkeeping.
Extensive graphics uses, adapting U.C. Irvine Physics dialogs to APL.
Program in NUTRITION analyses nutrients in students' diets.

Computer(s): Coast Community College District's IBM 370/155

Terminals: 28 hardcopy—plotting; 21 Graphics; 6 computer-controlled microfiche; plotters; optical readers; voice synthesis

Public Information: Index of Instructional Program Library

Contact(s): Michael J. Cox, Director
Computer Services Center
Golden West College
15744 Golden West Street
Huntington Beach, CA 92647
(714) 892-7711

Orange Coast Community College

Reasons for Nomination: Academic computing since 1959; unusual amount of support to faculty; program in Business Information Systems; students have unlimited hands-on computing.

Enrollment: 27,000 Total **Annual Users:** 5,000

Illustrative Applications: Decision models in BUSINESS.
Student problem-solving programs in ACCOUNTING.
Student programming in RPG, FORTRAN, COBOL, PL/1, ALC, APL.
Microfiche and audio applications.

Computer(s): Coast Community College District's IBM 370/155; 370/145

Terminals: 50 interactive; 2 remote batch

Public Information: Information Services Newsletter

Contact(s): Richard Howe, Chairman
Robert Schaulis, Director of Information Services
Orange Coast Community College
Business Division
2701 Fairview Road
Costa Mesa, CA 92626
(714) 556-5867

Sierra College

Reasons for Nomination: Five-year master plan for computing currently being implemented; 1977 computing budget is 7% of total college budget; administrative support.

Enrollment: 9,000 Total

Illustrative Applications: DATA PROCESSING program.

Computer(s): NCR 100; HP 2000E

Terminals: 16 interactive; plotter

Public Information: Five-year master plan

Contact(s): Don Price, Director
Computing Services Department
Sierra College
5000 Rocklin Road
Rocklin, CA 95677
(916) 624-3333

El Paso Community College

Reasons for Nomination: Data processing program has 100% placement of graduates; introductory data processing a requirement for majors in ten other program areas.

Enrollment: 4,350 FTE **Annual Users:** 1,435

Illustrative Applications: DATA PROCESSING program with about 250 majors per quarter.
Student programming in COBOL, FORTRAN, RPG, Assembler, PL/1.

Computer(s): IBM 360/40

Terminals: Planned

Contact(s): Perry M. Littleton, Supervisor, ADP
El Paso Community College
2501 West Colorado Avenue
Colorado Springs, CO 80904
(303) 471-1729

Lake City Community College

Reasons for Nomination: Integration of computing into spectrum of disciplines; computing literacy goal.

Enrollment: 3,000 FTE **Annual Users:** 1,500

Other Users: Prison

Illustrative Applications: Drills in MATHEMATICS.
Testing.
Computation in FORESTRY TECHNOLOGY.
Huntington simulations.

Computer(s): Data General DCC 116

Terminals: 12

Contact(s): Thomas Rowand, Director of Personnel & Computing Services
Lake City Community College
Lake City, FL 32055
(904) 752-1822

Miami-Dade Community College

Reasons for Nomination: Comprehensive data-processing curriculum; student placement in data processing jobs; computer open resource for students; computer support of open learning college.

Enrollment: 32,000 Total **Annual Users:** 2,500

Illustrative Applications: Programming in all major languages in BUSINESS DATA PROCESSING.
Problem-solving, simulations, analysis of laboratory data in PHYSICS.
Problem-solving in ELECTRICAL ENGINEERING.
Management games in BUSINESS.
RSVP instructional management system to support open college for individualization and prescription.

Computer(s): IBM 370/155; DEC PDP 11/40; DEC PDP 11/05; Regional Data Center's UNIVAC 1108; ITEL AS/5-3

Terminals: 22 interactive; 3 remote batch

Public Information: Brochure

Contact(s): Bruce DeSautel, Chairman
Business Data Processing
Miami-Dade Community College
Miami, FL 33167
(305) 685-4498

George Goldstein, Chairman
Electronic Data Processing
11011 S.W. 104 Street
Miami, FL 33167
(305) 596-1154

Pensacola Junior College

Reasons for Nomination: Expanding program; computer free resource for students; goal that each student is computer literate at graduation; stress on job skills that benefit the community; plans to be a network for Northwest Florida.

Enrollment: 24,700 Total **Annual Users:** 2,000

Other Users: Local public schools

Illustrative Applications: COMPUTER SCIENCE curriculum for an associate degree, certificate, and continuing education.
Problem-solving applications in BUSINESS ADMINISTRATION, ENGINEERING, and MATHEMATICS.

Computer(s): Burroughs 6700, Data General Nova 1200, DEC PDP 8L

Terminals: 20 interactive

Public Information: Information available.

Contact(s): Michele Boillot, Assistant Professor
Computer Science
Pensacola Junior College
1000 College Blvd.
Pensacola, FL 32504
(904) 676-5410

Brunswick Junior College

Reasons for Nomination: Increased computer power available to students; hands-on experience stressed; fifth year of cooperative effort between Georgia Department of Education and University of Georgia Board of Regents.

Enrollment: 1,150 Total **Annual Users:** 400

Illustrative Applications: Vocational data processing (programming and operations, applications: FORTRAN, COBOL, RPG, BASIC) drill and practice and problem-solving in Finite Mathematics and Calculus.
General problem-solving.

Computer(s): Burroughs B 1700, Sci-Data

Terminals: 4 interactive

Public Information: Information available on vocational technology course.

Contact(s): W. Eugene Nichols, Dean of Student Affairs
Brunswick Junior College
Altama at 4th
Brunswick, GA 31520
(912) 264-7220

North Idaho College

Reasons for Nomination: Hands-on emphasis in vocational program; students run college and outside government jobs; students participate in design and development of new data processing system.

Enrollment: 1,800 Total **Annual Users:** 150

Illustrative Applications: Vocational data processing.
Computer programming (COBOL, RPG2, FORTRAN), problem-solving in MATHEMATICS and SCIENCE.

Computer(s): NCR Century 101

Public Information: Brochure available on vocational-technical program.

Contact(s): Malcolm McClain, Mgr. Data Processing
North Idaho College
1000 W. Garden Avenue
Coeur d'alene, ID 83814
(208) 667-7422

Illinois Valley Community College

Reasons for Nomination: System usable by all levels of students, from primary to college; provides computer services to all interested areas; non-profit organizations; computer center has become zero-cost site in less than 2 years.

Enrollment: 2,200 FTE **Annual Users:** 240

Other Users: 10 high schools, 4 primary mental agencies, handicapped workshops.

Illustrative Applications: Drill and practice in MATHEMATICS, SCIENCE, and LANGUAGE ARTS.
Simulation in SCIENCE and SOCIAL SCIENCE.
Programming and operations courses.
Community services in data processing instruction, canned programs, and some self-written CAI in MATHEMATICS and ENGLISH.

Computer(s): 2 IBM 370/138

Terminals: 23 interactive

Public Information: Information available from the Public Information Office.

Contact(s): Hans J. Kuss, Director, Computer Science
Illinois Valley Community College
R.R. 1
Oglesby, IL 61348
(815) 224-6438

Moraine Valley Community College

Reasons for Nomination: Maximum accessability of computer and associated devices to students while maintaining system security.

Enrollment: 11,000 Total **Annual Users:** 1,000
4,800 Full Time

Illustrative Applications: Data processing instruction (programming and operation, systems courses, COBOL, BAL, FORTRAN, RPG2).
Simulation and problem-solving in Business, Electronics, and Physics.

Computer(s): IBM 370/135

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Terminals: 11 interactive

Contact(s): Robert Walsh, Assistant Dean of Information Systems
Moraine Valley Community College
10900 South 88th Ave.
Palos Hills, IL 60465
(312) 974-4300

Oakton Community College

Reasons for Nomination: Institutional commitment to CAI; local funding during austerity budgets; tutorial CAI commitment; extensive cost data available; outreach via CAI workshops.

Enrollment: 17,000 Total **Annual Users:** 3,000

Illustrative Applications: Computerized Vocational Information Guidance Service (CVIGS) Grades 13-14.
Tutorial CAI in ENGLISH, ANATOMY, ECONOMICS, CHEMISTRY, MUSIC, MATHEMATICS, BIOLOGY.
Tutorials in AERONAUTICS to prepare for FAA written exams.
STATISTICS—testing and grading in all disciplines.
DATA PROCESSING curriculum.

Computer(s): IBM 370/138

Terminals: 11 interactive

Contact(s): Joseph Borowski, Director
Learning Resources
Oakton Community College
7900 N. Nagle Avenue
Morton Grove, IL 60053
(312) 967-5120 Ext. 331

William Rainey Harper College

Reasons for Nomination: Instructional computing used throughout history of institution; Academic Computer Advisory Council and other innovative organizational arrangements; political setting has evolved to strong support; spectrum of applications; student-run learning lab and programming projects.

Enrollment: 19,000 Total **Annual Users:** 3,000
7,000 FTE (All on semester basis)

Other Users: Adjunct campus and off-campus uses; equipment shared with 5 high school districts.

Illustrative Applications: Two-year DATA PROCESSING.
Batch applications in ENGINEERING and MATHEMATICS, Numerical Control, ARCHITECTURE.
Keller Plan course with interactive testing of objectives in PSYCHOLOGY.
Computation programs keyed to lab experiments in CHEMISTRY.
Dartmouth's BERTIE program in LOGIC.
Drills in MUSIC, PARK MANAGEMENT, DIETETICS, PHYSICS.

Computer(s): HP 2000 Access; IBM 370/138

Terminals: 14 interactive

Contact(s): George C. Dorner, Associate Dean
Engineering, Math., Physical Science
William Rainey Harper College
Palatine, IL 60067
(312) 397-3000 Ext. 374

Community College of Baltimore

Reasons for Nomination: Established curricula in data processing and computer science; follow-up of graduates since 1965.

Enrollment: 5,000 FTE **Annual Users:** 500

Illustrative Applications: DATA PROCESSING curriculum, computer programming degree with scientific and commercial options.
ELECTRONICS students learning FORTRAN.
MANAGEMENT applications for BUSINESS students.

Computer(s): UNIVAC 9480; IBM 1620; Essex's HP 2000 Access INTEL 8080

Terminals: 15 interactive

Public Information: Departmental brochure, newsletter

Contact(s): Joyce Currie Little, Professor
Community College of Baltimore
Liberty Campus
Baltimore, MD 21215
(301) 396-0387

Essex Community College

Reasons for Nomination: Data processing program; computer science program; work/study for students; student access to variety of equipment; spectrum of applications.

Enrollment: 5,800 FTE **Annual Users:** 2,000

Illustrative Applications:
DATA PROCESSING program.
COMPUTER SCIENCE program.
Student programming in CHEMISTRY.
Academic Computing in ENGINEERING and PSYCHOLOGY.
Survey work in SOCIOLOGY.

Computer(s): IBM 370/125; HP 2000 Access

Terminals: 9 interactive

Contact(s): Michael Meyer, Dean of College
Essex Community College
Baltimore County, MD 21237
(301) 682-6000

Delta Community College

Reasons for Nomination: Member National League for Innovations; SIGI Evaluation Site; computing accessibility to students; faculty seminars and workshops; quality control over instructional applications.

Enrollment: 6,500 FTE **Annual Users:** 4,500

Illustrative Applications:
System of Interactive Guidance and Information (SIGI).
Associate degree program in business DATA PROCESSING.
Required student programming in ELECTRONICS TECHNOLOGY.
Forecasting and simulations in ECONOMICS.
Problem-solving and drills in BUSINESS and MATHEMATICS.

Computer(s): DEC PDP 11/50, IBM 360/40

Terminals: 25 interactive

Contact(s): M. Gene Arnold, Administrative Dean
Ben Paulson, Director Computing Ser.
Delta Community College
University Center, MI 48710
(517) 686-0400

Washtenaw Community College

Reasons for Nomination: Administrative support to academic computing to encourage faculty innovation; faculty training; development of curricular materials and programs.

Enrollment: 6,000 Total **Annual Users:** 800

Other Users: Local high school students

Illustrative Applications:
Numerically controlled Milling Machine for students.
Computer-generated exercises in ALGEBRA and ARITHMETIC.
CALCULUS adjunct required in first year calculus.
Test generation and grading in CHEMISTRY.
Grading of laboratory work in CHEMISTRY.
Problem-solving and Huntington simulations in PHYSICS.
Drills in READING.

Computer(s): University of Michigan's Amdahl; 2000F; UNIVAC 9030; LSI 11

Terminals: 26 (including graphics and plotters)

Public Information: Washtenaw Computer Communication

Contact(s): Mehran Thomson, Divisional Director
Exact Sciences
Washtenaw Community College
Ann Arbor, MI 48106
(313) 973-3356

Mesabi Community College

Reasons for Nomination: Consistently ranks first or second in total connect time among the 18CC's in MECC system; students encouraged to use computers for personal problem-solving and independent study; general background and hands-on experience stressed.

Enrollment: 600 Full Time **Annual Users:** 225

Illustrative Applications:
Programming in BASIC and FORTRAN.
Problem-solving in MATHEMATICS and SCIENCE.
Test and problem generation and scoring.

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Computer(s): MECC's UNIVAC 1110; 3 Wang 2200

Terminals: 6 interactive

Contact(s): Everett Hurd, Computer Coordinator
Mesabi Community College
Virginia, MN 55792
(218) 741-9200

Northland Community College

Reasons for Nomination: High student use of system; teacher participation in computer program; in top five in total connect time of Minnesota's community colleges.

Enrollment: 350 Total **Annual Users:** 150

Illustrative Applications: Computer literacy course, programming courses in BASIC, FORTRAN and COBOL.
Data Base Analysis (test and survey analysis in nursing, human relations, and biology).

Computer(s): MECC

Terminals: 6 interactive

Contact(s): Jack Kramer, Teacher
Data Processing
Northland Community College
Thief River Falls, MN 56701
(218) 681-2181

St. Louis Community College At Florissant Valley

Reasons for Nomination: Large total environment data processing program; on-campus computer laboratory; industry-experienced instructors; campus chapter of Data Processing Management Association (DPMA); industry advisory committee, high placement of graduates; State of Missouri funding for in-service high-school teacher training.

Enrollment: 10,000 Total **Annual Users:** 1,000

Illustrative Applications: Business DATA PROCESSING curriculum with over 2,000 annually enrolled including 600 majors.
Computer-Assisted ACCOUNTING.
Scientific programming in ENGINEERING.
Computer graphics in DRAFTING.
Descriptive GEOMETRY with plotters.
Problem-solving using BASIC in MATHEMATICS and PHYSICS.

Computer(s): IBM 360/30; HP 2000

Terminals: 3 interactive; plotter

Public Information: Brochure on data processing programs

Contact(s): James H. Blumenberg, CDP, CDE
Associate Professor
Data Processing Department
St. Louis Community College
At Florissant Valley
3400 Pershall Road
St. Louis, MO 63135
(314) 595-4330

Burlington County College

Reasons for Nomination: On-line testing in most disciplines; systems approach to education with clearly defined learning objectives.

Enrollment: 5,300 Total **Annual Users:** 4,200
4,100 Full Time

Illustrative Applications: EDP curriculum features languages, batch and time-sharing modes.
On-line testing using optical scanner.
Tutorials and drills in PHYSICS.

Computer(s): DEC PDP 10

Terminals: 20 interactive

Contact(s): Michael Barnes, Director for Information Systems
Joy R. Hughes, Measurement and Evaluation Specialist/Acting Director of Educational Development and Evaluation
DeWitt Peterson, Chairperson of Business Studies
Burlington County College
Pemberton, NJ 08068
(609) 894-9311

Mercer County Community College

Reasons for Nomination: Computer science and data processing programs; continuing education for research-oriented community; 10 years experience.

Enrollment: 5,250 FTE **Annual Users:** 1,500

Illustrative Applications:
- Over 1,000 students per year take introductory courses in DATA PROCESSING or COMPUTER SCIENCE.
- About 500 students major in DATA PROCESSING and COMPUTER SCIENCE.
- On-line testing in all departments.
- Problem-solving in ENGINEERING and ACCOUNTING.
- Tutorials in ALLIED HEALTH.

Computer(s): DEC PDP 11/45; IBM 360/40; DEC PDP 8

Terminals: 14 interactive

Contact(s): Sallyann Hanson, Chairperson
Math/Physics/Computer Science
Mercer County Community College
P.O. Box B
Trenton, NJ 08690
(609) 586-4800

Middlesex County College

Reasons for Nomination: Computer science program places all graduates; large user of New Jersey educational computing network.

Enrollment: 5,300 FTE **Annual Users:** 600

Illustrative Applications:
- COMPUTER SCIENCE program.
- Simulations in RADIOLOGY.
- Student programming in ENGINEERING.
- Computation and simulation in BUSINESS.

Computer(s): IBM 370/115; DEC PDP 8E; also New Jersey Educational Computing Network; DEC PDP 11/70; IBM System 32

Terminals: 18 interactive

Contact(s): John J. Dineen, Chairman
Department of Computer Science
Middlesex County College
Woodbridge Avenue
Edison, NJ 08817
(201) 548-6000, Ext. 361

Ocean County College

Reasons for Nomination: Over 4,000 students received credit for CAI courses since 1970; cost/effectiveness studies and data on student performance and low cost of courses.

Enrollment: 3,000 FTE **Annual Users:** 1,000

Other Users: Area public schools

Illustrative Applications:
- CAI Tutorials in TYPEWRITING, NURSING, MATHEMATICS, and Basic Computer Systems.
- Student programming in variety of languages.
- Two-year COMPUTER SCIENCE degree program.

Computer(s): UNIVAC 70/46 being upgraded

Terminals: 21 on campus; 20 at user schools.

Public Information: General network description and list of available software products.

Contact(s): Edward J. Lias, Director
Ocean County College Information Network
College Drive
Toms River, NJ 08753
(201) 255-5419

Borough of Manhattan Community College

Reasons for Nomination: Computer program expanded over the past 12 years; all courses taught with "hands-on" computer experience; all faculty have minimum 5 years' practical experience in data processing industry.

Enrollment: 6,300 FTE **Annual Users:** 1,500

Illustrative Applications:
- Business DATA PROCESSING curriculum including operations and programming.
- Medical record processing of course for students.
- Computers in society course for liberal arts students.

Computer(s): IBM 360/30; RCA 70/35; IBM 2922; Cincinnati Mill Acron 40B

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Terminals: 18 interactive

Contact(s): Marvin Kushner, Prof. Data Processing
James Brooks, Asst. Prof. Data Processing
Borough of Manhattan Com. College
1633 Broadway
New York, NY 10019
(212) 262-3565

Broome Community College

Reasons for Nomination: Computing highly integrated into spectrum of curricula; accessibility of computing to all students.

Enrollment: 3,300 FTE **Annual Users:** 1,400

Other Users: Local high schools

Illustrative Applications: Graphics and coordinate geometry in CIVIL TECHNOLOGY.
Macro and micro economics CAI in ECONOMICS.
Student programming in CALCULUS and STATISTICS.
All students program in FORTRAN in ENGINEERING SCIENCE.
Microprocessor applications in ELECTRICAL TECHNOLOGY.
BUSINESS applications and DATA PROCESSING option.

Computer(s): DEC PDP 10; IMSAI; 2 Intel 8080

Terminals: 34 interactive; 3 Graphics; 1 Plotter

Public Information: Newsletter

Contact(s): John Lewit, Director
Computer Center
Broome Community College
Upper Front Street
Binghamton, NY 13902
(607) 772-5011

Lorain County Community College

Reasons for Nomination: Data processing technology curriculum; high local placement rate for graduates; unique system for compiling and testing programs written by students.

Enrollment: 5,300 Regular; **Annual Users:** 600
2,000 Non-credit

Illustrative Applications: Computer operations, programming, and systems analysis in DATA PROCESSING TECHNOLOGY.
Simulations in BUSINESS.
Problem-solving with portable classroom minicomputer in MATHEMATICS and SCIENCE.
Law enforcement system simulation.

Computer(s): IBM 360/40; IBM System 3; IBM 5100

Terminals: 13 interactive; 2 remote batch

Contact(s): Estus Newton, Director
Data Processing Services
Lorain County Community College
1005 N. Abbe Road
Elyria, OH 44035
(216) 365-4191

Portland Community College

Reasons for Nomination: All production work performed by students; computer center lab to facilitate student interaction with computer.

Enrollment: 14,000 FTE **Annual Users:** 1,000

Illustrative Applications: Programming in Assembler, BASIC, FORTRAN, COBOL, RPG, PL/1.
Problem-solving in ENGINEERING.
Business DATA PROCESSING.
Test analysis.
CMI in the NURSING program.
Computer operations courses.

Computer(s): Honeywell 120; leased time on IBM 370/138; State System of Higher Education's Honeywell 6640

Terminals: 12 interactive; 1 remote batch

Contact(s): Tom Crowder, Coordinator Data Processing
Portland Community College
12000 S.W. 49th Street
Portland, OR 97219
(503) 244-6111

Rhode Island Junior College

Reasons for Nomination: Integrated hardware at two campuses provides full range of services at minimal cost; well-developed staff and organization.

Enrollment: 6,352 FTE **Annual Users:** 2,600

Other Users: R.I. Department of Education (Board of Regents)
R.I. Department of Administration
Hardware Consortium for 10 local Educational Agencies

Illustrative Applications: Over 350 hours of CAI course materials in over 20 subject areas.
Over 25 hours of Career Information.
Full Data Base (TOTAL) inquiry to all managerial levels.
Remote job entry in COMPUTER SCIENCE in COBOL, RPG II, Assembler, FORTRAN, and BASIC.

Computer(s): DEC PDP 11/34; IBM 370/138

Public Information: RIJC Courier

Contact(s): Paul Bartolomeo, Director
Department of Computer Resources
Rhode Island Junior College
400 East Avenue
Warwick, RI 02886
(401) 825-2135

Roane State Community College

Reasons for Nomination: Model institution for Tennessee; first Tennessee community college using instructional computing; spectrum of applications; expanding facilities; in-service training in computer literacy a part of staff development.

Enrollment: 1,637 FTE **Annual Users:** 1,600

Other Users: Local public schools

Illustrative Applications: Two-year SCIENCE TECHNOLOGY curriculum with scientific and business computer options.
Graphics in PHYSICS.
Simulations, games, problem-solving and drills in SCIENCES, MATHEMATICS, LANGUAGE ARTS, and SOCIAL SCIENCES.

Computer(s): DEC PDP 11/70

Terminals: 16 interactive including Graphics

Contact(s): Agnes NamKung
Career Education Division
Fred Martin
Dean, Admin. Services
Roane State Community College
Harriman, TN 37748
(615) 354-3000

San Antonio College

Reasons for Nomination: Data processing program; placement of graduates; development of computer-assisted multimedia laboratory and program in remedial and Freshman English; large population of minority students gaining skills in English.

Enrollment: 15,000 FTE

Other Users: Colleges and public high school

Illustrative Applications: DATA PROCESSING curriculum.
Remedial and Freshman ENGLISH multimedia laboratory; interactive testing and CAI serves 4,500 students annually.
Interdisciplinary HUMANITIES program providing computer dialogues and CMI in ENGLISH, HISTORY, and PHILOSOPHY.

Computer(s): IBM 370/158; IBM 370/148; IBM System 3.

Terminals: 100 interactive; 3 remote batch, 1 graphics

Contact(s): Vivian Rudisill, Director
English Multi-Media Laboratory
Alvin J. Stehling, Chairman
Data Processing Department
San Antonio College
1300 San Pedro Avenue
San Antonio, TX 78284
(512) 734-7311

Northern Virginia Community College (Alexandria Campus)

Reasons for Nomination: TICCIT demonstration site; interactive computer-controlled information television; large number of student users; quality of instructional materials.

Enrollment: 4,600 FTE **Annual Users:** 1,200

Illustrative Applications: TICCIT system offers complete MATHEMATICS (introductory algebra) and freshman ENGLISH courses.

Computer(s): 2 Data General Nova 800

Terminals: 128 interactive

Contact(s): Monica Sasscer, Director
(TICCIT) Project
Northern Virginia Community College
(Alexandria Campus)
3001 North Beauregard Street
Alexandria, VA 22311
(703) 323-4310

Lower Columbia College

Reasons for Nomination: Thirteen years experience; prepared Instructional Computing Plan for State of Washington community colleges; spectrum of applications and facilities.

Enrollment: 2,200 FTE **Annual Users:** 270 plus Guidance

Illustrative Applications: DATA PROCESSING TECHNOLOGY.
Interdisciplinary courses with DATA PROCESSING and ELECTRONICS.
Marketing strategy and executive game simulations in BUSINESS.
Computer-assisted interactive testing in STATISTICS.
Survey area calculations in ENGINEERING.
PHYSICS lab.
Drills and tutorials in CHEMISTRY.

Computer(s): IMSAI 8080; REMCOM 4780; Washington State University's 360/70; Eastern Washington State's UNIVAC 70/7; Evergreen State College's HP 2000

Terminals: 9 interactive; graphics and plotter

Contact(s): Alan Howard, Program Director
Data Processing Services
Lower Columbia College
1600 Maple Street
Longview, WA 98632
(206) 577-2348

Fox Valley Technical Institute

Reasons for Nomination: Emphasis on individualized instruction; computer support for open entry/open exit courses; extensive development of CAI/CMI materials; in-service training for administrators and faculty.

Enrollment: 3,800 FTE **Annual Users:** 3,000

Illustrative Applications: Developed ENGLISH communication skills materials (COMSKL) including 18,000-item drills, tests, and reviews (an IBM IUP).
Problem-solving, e.g., hydraulics of water, in FIRE SCIENCE.
CMI/CAI in SOCIOLOGY, ENGLISH, FOOD SERVICE, NURSING, SECRETARIAL program, ACCOUNTING.
Drills, student programming, and problem-solving in computerized ACCOUNTING.

Computer(s): IBM 370/125

Terminals: 8 interactive

Public Information: Brochure "CAI."

Contact(s): Ric Voeller, Specialist
Department of CAI
Fox Valley Technical Institute
P.O. Box 2277
Appleton, WI 54911
(414) 739-8831

ELEMENTARY/SECONDARY

Sierra Vista School District

Reasons for Nomination: Achievement gains for remedial students; vocational data processing training successful; program operational for over 10 years.

Enrollment: 5,000 K-12 **Annual Users:** 2,000

Illustrative Applications: Remedial drill and practice for grades K-8 in MATH and READING.
COMPUTER SCIENCE curriculum with programming in BASIC, COBOL and FORTRAN.
Computer literacy in business curriculum.

Computer(s): DEC PDP 8E; CCC A16

Terminals: 21 interactive

Contact(s): Ollie Townsend, Director ADP
Sierra Vista School District
4001 Fry Blvd.
Sierra Vista, AZ 85635
(602) 458-4391, Ext. 15

Avocado School

Reasons for Nomination: Young children learning programming and logic of how a computer operates; relating this information to parents and day-to-day activities.

Enrollment: 670 **Annual Users:** 70

Illustrative Applications: Elementary age children learning to program in BASIC.

Computer(s): HP 2000 Access

Terminals: 1 interactive

Contact(s): Lynn Arkan, MGM Coordinator
Avocado School
3845 Avocado School Road
La Mesa, CA 92041
(714) 461-7700

Castle Park High School

Reasons for Nomination: Computing integrated into mathematics curriculum; teacher training.

Enrollment: 1,400; 10-12 **Annual Users:** 100

Illustrative Applications: Informal teacher literacy.
Analysis in GEOMETRY and MATH.

Computer(s): Access to International University's HP 2000E; access to Grossmont High School District, El Cajon

Terminals: 2 interactive

Contact(s): Warren M. Cox, Mathematics Teacher
Castle Park High School
1395 Hilltop Drive
Chula Vista, CA 92101
(714) 427-0404

Community Computer Center

Reasons for Nomination: Emphasis on teaching children; low operating budget with little outside support; one of the first non-profit organizations to offer small-scale computing to an entire community.

Enrollment: Not applicable **Annual Users:** 8,000

Other Users: High schools

Illustrative Applications: Educational games, designed to introduce children to working with the computer.
Games in MATHEMATICS.
Simulations in LANGUAGE and ECONOMICS.

Computer(s): DEC PDP 11/15

Terminals: 8 interactive

Public Information: Various articles in "People's Computers," "Calculators and Computers," SCCS Interface

Contact(s): Joanne Verplank
Community Computer Center
1919 Menalto Avenue
Menlo Park, CA 94025
(415) 326-4444

Goleta Valley Junior High School

Reasons for Nomination: Student interest and achievement; range of applications; advanced program for 7-8 grade students.

Enrollment: 1,500; 7-8 **Annual Users:** 200

Illustrative Applications:
Student programming.
Remedial MATH drills.
Problem-solving in ALGEBRA and LOGIC.
Generation of worksheets.

Computer(s): Data General Nova 2 in local high school; Monroe 1880

Terminals: 1 interactive

Contact(s):
Glenn Hunter, Mathematics Teacher
Goleta Valley Junior High School
6100 Stow Canyon Road
Goleta, CA 93017
(805) 967-3486

Huntington Beach Union High School District

Reasons for Nomination: Administrative and instructional applications on one computer with priority for instruction; locally funded; students develop software; workshops provided in a variety of areas.

Enrollment: 20,000 **Annual Users:** 6,000

Other Users: 5 feeder elementary districts; 4 regional school districts.

Illustrative Applications:
COMPUTER SCIENCE curriculum for high school and elementary with tutorials in APL, VSBASIC, individual learning packets in FORTRAN, programming in ASSEMBLER and COBOL.
Word and text processing training.
Cross-age tutoring for computer literacy.
Classroom competency based test grading with student progress storage and classroom report system.
Career Information System.

Computer(s): IBM 370/135; IBM 370/145

Terminals: 60 interactive

Public Information: *Bits & Bytes* (newsletter)

Contact(s):
Glen Dysinger, Assistant Superintendent, Planning, Research & Evaluation
Huntington Beach Union High School District
5201 Bolsa Avenue
Huntington Beach, CA 92647
(714) 898-6711

Lawrence Hall of Science

Reasons for Nomination: Expose large population to computing; provides computer time to the public every weekend; wide variety of applications for all age levels; graphics applications; provide computer resource for local schools at all levels.

Annual Users: 27,000 (not including exhibit or outreach users)

Other Users: 55 local schools (pre-K through college), general public

Illustrative Applications:
Workshops introducing students in grades 3-12 to computers.
After-school and evening classes for children and adults offering an introduction to computers and programming.
Specially tailored classes for gifted and minority students.
Applications in ENERGY, NUTRITION, GAMES and SIMULATIONS as part of museum exhibits.
CAI curriculum development in college BIOLOGY and education for the deaf.

Computer(s): Data General Eclipse; 2 Data General Nova 800; Data General Nova 1200; 2 microcomputers

Terminals: 38 interactive; 2 Hewlett Packard Graphics Plotters; 1 Tektronix 611 Scope

Public Information: Brochure available
Educational Computing (Newsletter)

Contact(s):
Arthur Luehrmann, Director of Computer Education and Operations
Bob Kahn, Computer Education Project
Lee Berman, User Services
Lawrence Hall of Science
University of California at Berkeley
Berkeley, CA 94720
(415) 642-1238, 642-3167

Los Angeles City Schools

Reasons for Nomination: Massive CAI program; student achievement gains; experimental instructional management programs; test scoring program supports entire district.

Enrollment: 600,000 **Annual Users:** 187,500

Illustrative Applications:
CAI drill and practice for elementary and junior high in MATH, READING, and LANGUAGE ARTS.
Classroom Teacher Support System produces worksheets, generates and grades tests.
Student programming in FORTRAN.
Problem-solving and simulation in MATH and SCIENCE.

Computer(s): IBM 360/50; 8 HP 2000F; 1 HP 2000 Access

Terminals: 403 interactive

Contact(s):
Frank Toggenburger, Director,
Educ. Sys. & Programming Branch
Los Angeles City Schools
Room G-372, 450 N. Grand Avenue
Los Angeles, CA 90012
(213) 625-4919

Los Nietos School District

Reasons for Nomination: Integration of CAI in total academic program; improved student achievement levels and attitudes; parental and community involvement.

Enrollment: 2,500; K-8 **Annual Users:** 1,800

Other Users: Neighboring elementary school districts.

Illustrative Applications:
Drill and practice in READING, MATHEMATICS, and LANGUAGE ARTS.
Career Information System.
GED evening courses for adults.

Computer(s): 2 CCC A16s; 1 CCC 17; access to neighboring high school district's IBM 370/135

Terminals: 86 interactive

Contact(s):
Nelson Crandall
ESAA Project Director
Los Nietos School District
8324 Westman Avenue
Whittier, CA 90606
(213) 692-0271

Menlo-Atherton High School

Reasons for Nomination: High student utilization of computer in problem-solving modes; computer viewed as total school resource.

Enrollment: 1,800; 9-12 **Annual Users:** 900

Illustrative Applications:
Drill and practice for remedial students in MATHEMATICS.
Computer programming in BASIC and problem-solving.
Simulation in SCIENCE.
Career and counseling program.
Comprehensive Achievement Monitoring (CAM).

Computer(s): HP2000E; access to Santa-Clara School System's HP 2000F

Terminals: 8 interactive

Contact(s):
Harriet Silver, Math Dept. Chairman
Menlo-Atherton High School
Ringwood and Middlefield
Atherton, CA 94025
(415) 369-1411

Newport-Mesa Unified School District

Reasons for Nomination: Student-managed and developed CAI program; 10 years in instructional computing; parents receive information on child's success in specific skills.

Enrollment: 25,000 **Annual Users:** 20,000

Other Users: Three nearby school districts.

Illustrative Applications:
Management system for competency-based education, K-12 in 13 skill and knowledge areas.
Guidance Information System.
Computer-aided MATHEMATICS instruction, primarily problem-solving.

Computer(s): DEC PDP 10; DEC PDP 8I

Terminals: 40 interactive

Public Information: Information available

Contact(s):
Dale Woolley, Director of Pupil Personnel Services & Evaluation
Cora Schultz, Director of Development
Newport-Mesa Unified School District
Newport Beach, CA 92660
(714) 556-3295

Palo Alto Unified School District

Reasons for Nomination: Spectrum of applications; prime objective of computer literacy; local curriculum development; large-scale in-service for staff and parents; special education programs.

Enrollment: 12,000; K-12 **Annual Users:** 2,500

Illustrative Applications:
Computer literacy program introduced to 7th graders.
Problem-solving in MATH and SCIENCE.
CAI for deaf children in READING, MATH, and LANGUAGE ARTS.
Foreign language programs in FRENCH, SPANISH, GERMAN, and LATIN.
Career Information System (EUREKA).

Computer(s): HP 2000 Access; HP 3000

Terminals: 80 interactive

Contact(s):
Ernest Pope, Program Supervisor for Educational Technology
Palo Alto Unified School District
25 Churchill Avenue
Palo Alto, CA 94306
(415) 327-7100

Ravenswood City School District

Reasons for Nomination: Academic computing since 1968; pioneer in use of CAI in Math and Reading; now changing from CAI to instructional management.

Enrollment: 3,400; K-8 **Annual Users:** 1,200

Illustrative Applications: Drill and practice and instructional management in READING and MATHEMATICS.

Computer(s): Stanford University's HP 2000E

Terminals: 16 interactive

Contact(s):
Mary Alvord, Assessment Coordinator
Ravenswood City School District
2160 Euclid Avenue
E. Palo Alto, CA 94303
(415) 323-9411

San Benito Joint Union High School

Reasons for Nomination: Use of computer terminals and programmable calculators integrated into science and mathematics laboratory curricula; student-developed administrative packages.

Enrollment: 1,450 **Annual Users:** 800

Illustrative Applications:
Remedial drills in MATHEMATICS.
Programming and problem-solving in ALGEBRA I & II and TRIGONOMETRY.
Tutorials in FRENCH.

Computer(s): 25 Monroe 1665 programmable calculators; access to Gavilan College's HP 2000 Access

Terminals: 1 interactive

Contact(s):
Allen Dunn, Math. Dept. Chairman
San Benito Joint Union High School
1220 Monterey Street
Hollister, CA 95023
(408) 637-5831, Ext. 35

San Francisco Unified School District

Reasons for Nomination: Vocational training in data processing; low-cost computing for large number of students by sharing software, curriculum, expertise; student-run facility; K-12 instruction incorporates computer in a spectrum of applications.

Enrollment: 45,800; K-12 **Annual Users:** 8,000

Other Users: Parochial system in San Francisco; University of San Francisco; Exploratorium.

Illustrative Applications:
Drill and practice for grades K-12 in a variety of disciplines.
Data processing with emphasis on employment skills such as data entry, computer operations.
Interactive guidance system tailored to California.
SCIENCE program to develop a "total media".

Computer(s): HP 2000 Access

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Terminals: 50 interactive

Public Information: Access (monthly newsletter)

Contact(s): Eugene Muscat, Project Director
EDP Resource Centers
Judith Sokol, Curriculum Coordinator
Woodrow Wilson High School
400 Mansell Street
San Francisco, CA 94134
(415) 239-6460

San Jose Unified School District

Reasons for Nomination: Developing a computer program with microprocessors in each school; policy supporting growth; formal teacher in-service training; teacher-developed math curricular materials.

Enrollment: 38,000; K-12 **Annual Users:** 1,000

Illustrative Applications: Computer programming in BASIC; CAI.
Computer literacy for elementary students.
Problem-solving in MATHEMATICS, 7-12.

Computer(s): DEC PDP 8; 14 IMSAI, Polymorphic; Cromemco microprocessors; HP 2000

Terminals: 24 interactive

Contact(s): Peter Grimes, Supervisor Math. and Science, K-12
San Jose Unified School District
1605 Park Avenue
San Jose, CA 95126
(408) 998-6124

Office of the Santa Clara County Superintendent of Schools

Reasons for Nomination: Serve broad area; cost-effective service for users with this organizational structure; developing foreign language materials.

Annual Users: 25,000

Other Users: 9 counties.

Illustrative Applications: Problem-solving in the BASIC language.
Simulations in SCIENCE and SOCIAL STUDIES.
Computerized Vocational Information System (CVIS).

Computer(s): IBM 370/145; HP 2000F

Terminals: 30 interactive

Contact(s): Marilyn Carson, Director of Data Processing (RECAP)
Office of the Santa Clara County Superintendent of Schools
100 Skyport Drive
San Jose, CA 95110
(408) 299-4251

Sequoia Union High School District

Reasons for Nomination: Developing models of how to systematically provide information to students, parents, researchers, and administration.

Enrollment: 10,200 **Annual Users:** 10,200

Other Users: Eight feeder school districts.

Illustrative Applications: Comprehensive Achievement Monitoring (CAM) system in most disciplines.
Programming in BASIC.
Simulations in SCIENCE and SOCIAL STUDIES.

Computer(s): Santa Clara Network's HP 2000E

Terminals: 22 interactive

Contact(s): Allen J. Gruman, Director
Research and Data Processing
Sequoia Union High School District
480 James Avenue
Redwood City, CA 94063
(415) 369-1411

Valley High School

Reasons for Nomination: Continuation school for secondary students who were unsuccessful in regular schools; use computer to achieve a variety of affective as well as cognitive objectives.

Enrollment: 300 **Annual Users:** 150

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Illustrative Applications: Interest and self-concept testing and counseling.
Programs to prepare students for work experience.
CAI in ENGLISH/READING, SCIENCE, DRIVER EDUCATION, NUTRITION, and HISTORY.

Computer(s): U.S. International University's HP 2000E

Terminals: 2 interactive

Contact(s): Charlene West
Escondido Union High School District
240 S. Maple
Escondido, CA 92025
(714) 747-3963

Will C. Crawford High School

Reasons for Nomination: Continually expanding program; student-written administrative programs; computer science program.

Enrollment: 1,800; 10-12 **Annual Users:** 200

Illustrative Applications: Student programming in BASIC and FORTRAN.
Guidance Information System.
ACCOUNTING program.
Problem-solving in MATHEMATICS.
Drill and practice for remedial MATHEMATICS.
Simulations in SCIENCE and SOCIAL STUDIES.

Computer(s): Three HP 2000 Access; District Education Center's IBM 370

Terminals: 3 interactive

Contact(s): Robert Juel, Computer Coordinator
Franklin Rogers, Math Teacher
Will C. Crawford High School
4191 Colts Way
San Diego, CA 92115
(714) 583-2500

Boulder Valley Area Vocational Tech Center

Reasons for Nomination: Trains high school and post-secondary students in data processing for entry-level into industry. Receives 53% reimbursement from the state.

Enrollment 105 Full Time **Annual Users:** 60

Illustrative Applications: Programming and computation in courses in programming and business programming.
Data entry training.
Computer operator training.

Computer(s): IBM 370/145

Terminals: 5 interactive

Public Information: 10-page brochure describing data processing program career tracks.

Contact(s): Richard Olson
Data Processing Coordinator
Boulder Valley Area Vocational Tech Center
6600 Arapahoe
Boulder, CO 80303
(303) 477-1010, Ext. 380

General Mitchell High School

Reasons for Nomination: Computer applied to non-computer related subjects as well as programming and application courses.

Enrollment: 2,050; 10-12 **Annual Users:** 400

Illustrative Applications: Computer Science and programming in BASIC and FORTRAN.
Simulation and reduction of data in CHEMISTRY, PSYCHOLOGY, PHYSICS.
Simulation in BUSINESS.

Computer(s): DEC PDP 10

Terminals: 3 interactive

Contact(s): John Norton, Math Teacher
General Mitchell High School
1205 Potter Drive
Colorado Springs, CO 80909
(303) 635-6496

George Washington High School

Reasons for Nomination: Academic computing since 1960; wide variety of computer-related areas available to students; model making stressed; community outreach via studies performed by students.

Enrollment: 2,600; 9-12 **Annual Users:** 550

Illustrative Applications: Programming and application work in BASIC, ALGOL, and FORTRAN.
Simulation in BUSINESS, PHYSICS, SOCIAL SCIENCES.
Problem-solving and simulation in MATHEMATICS.
Data production and simulation for remedial MATHEMATICS.

Computer(s): Denver Public Schools' UNIVAC 1130; two Monroe 1880 programmable calculators, WANG 600

Terminals: 6; one plotter, five programmable calculators

Contact(s): Irwin Hoffman, Computer Math Teacher
George Washington High School
655 South Monaco Street
Denver, CO 80224
(303) 399-2214

Jefferson County Public Schools

Reasons for Nomination: Outreach to public and private schools in other school districts; integration of computer in mathematics; computing literacy of teachers.

Enrollment: 21,500; 10-12 **Annual Users:** 2,500

Other Users: 1800 in 4 public and 5 parochial schools outside the school district.

Illustrative Applications: Simulations in SCIENCE and SOCIAL SCIENCES.
Modeling in MATHEMATICS.
Curriculum COMPUTER SCIENCE and COMPUTER PROGRAMMING.
CMI in elementary and junior high school.

Computer(s): Two HP 2000Fs; HP 2000 Access

Terminals: 45 interactive

Contact(s): Eugene A. Collins, Resource Specialist, Instruc. Computer Systems
Jefferson County Public Schools
1209 Quail Street
Lakewood, CO 80215
(303) 234-7000, Ext. 391

Bedford Junior High School

Reasons for Nomination: All students learn programming; students develop instructional software; computer club; adult volunteer training program; interdisciplinary training of teachers.

Enrollment: 600 **Annual Users:** 350

Illustrative Applications: Remedial drill in MATHEMATICS.
Programming instruction and problem-solving for students.
Computer-related SCIENCE projects.
Worksheet generation.

Computer(s): DEC PDP 8M

Terminals: 1 interactive

Public Information: Booklet for teachers. Booklet for computer room volunteers

Contact(s): Ruth Kemish, Division Coordinator Math, Science & Reading
Bedford Junior High School
170 Riverside Avenue
Westport, CT 06880
(203) 227-8451

Canterbury School

Reasons for Nomination: Extensive program in science with a relatively small inexpensive computer system; programs in chemistry and physics developed locally; programs designed for easy transportability; facilities available to students at all times.

Enrollment: 300; 9-12 **Annual Users:** 80-90

Other Users: Local youth service organization.

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Illustrative Applications: Tutorials, simulations, drills, and problem-generation in CHEMISTRY for grades 10-12.
Drills and simulations in PHYSICS for grade 12.
Simulations and tutorials in PHYSICAL SCIENCE for grade 9.
COMPUTER SCIENCE for grade 12.

Computer(s): DEC PDP 8M

Terminals: 1 interactive

Public Information: Cauchon, Paul A., *Chemistry With a Computer,* 1976, $9.95
Order from: Educomp
196 Trumbull St.
Hartford, CT 06103

Cauchon, Paul A., *Tutorial Exercises for Chemistry,* 1973. Teacher's Resource Guide, $6.00, Student Workbook, $2.50.
Order from: Digital Equipment Corp.
Software Distribution Ctr.
146 Main Street
Maynard, MA 01754

Contact(s): Paul A. Cauchon, Chairman, Science Dept.
Cantebury School
Box 5000
New Milford, CT 06776
(203) 354-5514

Alexis I. duPont School District

Reasons for Nomination: Expanding program; student- developed applications; active interest in exchanging software with others.

Enrollment: 3,000; K-12 **Annual Users:** 1,400

Other Users: 30 districts and institutions use CCC A16 and HP 2000 administered by this school; remedial; adult continuing education.

Illustrative Applications: GUIDANCE information system.
Drill and practice in MATHEMATICS, READING, and LANGUAGE ARTS grades 5-11.
Computer-managed curriculum for 9th grade SCIENCE which includes on-line testing.
COMPUTER SCIENCE curriculum.
Programs in ENGLISH, MATHEMATICS, BUSINESS EDUCATION, SCIENCE and HOME ECONOMICS.
Middle School Computer Clubs.

Computer(s): DEC PDP 11/34; DEC PDP 8I; CCC A16; HP 2000

Terminals: 21 interactive

Public Information: Brochure available; COMPU-NOTES (monthly newsletter)

Contact(s): Carl Hauger, Computer Project Director
Alexis I. duPont School District
100 Hillside Road
Greenville, DE 19807
(302) 658-8065

Newark School District

Reasons for Nomination: Goal to give all students access to computers; open computer room in each high school; 90% local funding; 12 year history; developed Computer Education Guide for district teachers.

Enrollment: 17,000; K-12 **Annual Users:** 4,000

Illustrative Applications: Computer literacy.
Three courses in COMPUTER PROGRAMMING.
Problem-solving in MATHEMATICS and SCIENCE.
Simulations and data base manipulation in SOCIAL STUDIES.
Guidance Information System (GIS).

Computer(s): Project Delta's DEC PDP 11/45; 9 WCS 10; 3 WCS 20; State's CCC A16

Terminals: 17 interactive

Public Information: Curriculum Guide

Contact(s): Neil Walzl, Supr. of Math.
Newark School District
83 E. Main Street
Newark, DE 19711
(302) 731-2220

Ballou High School

Reasons for Nomination: Seven years experience; community backing and local funding; serves large urban school with low income students; curriculum development and integration.

Enrollment: 3,000, 9-12 **Annual Users:** 750

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Illustrative Applications: Career-oriented DATA PROCESSING curriculum.
Drills and practice in MATHEMATICS and ENGLISH.
Simulation in SCIENCE, SOCIAL SCIENCES, and BUSINESS.
Application programming in BUSINESS.
Guidance Information System.

Computer(s): DEC PDP 11/34; DC government's IBM 370/158

Terminals: 19 interactive

Contact(s): Henry M. Thompson, Data Processing
Ballou Senior High School
4th and Trenton Sts., S.E.
Washington, DC 20032
(202) 767-7071

Model Secondary School for the Deaf

Reasons for Nomination: TICCIT computer system designed for deaf users; using the computer as a means of communication (e.g., terminals placed in dormitories) as well as for instruction; tapping unusual capabilities of the computer for students.

Enrollment: 200; 9-12 **Annual Users:** 200

Other Users: Kendall Demonstration Elementary School; Gallaudet College.

Illustrative Applications: Tutorials and drill in ENGLISH and MATHEMATICS.
Language development and visual enrichment using video capabilities.
Means of communication for deaf students.
Career education materials.

Computer(s): Gallaudet's DEC PDP 10;
Data General Super NOVA

Terminals: 75; 17 of these are video phone terminals.

Public Information: Brochure

Contact(s): Paul Watson, Director, Division of Curriculum Development
Gallaudet College
Kendall Green
Washington, DC 20002
(202) 447-0423

St. Anselm's Abbey School

Reasons for Nomination: Small private school where all students use computer; center for a network of small schools.

Enrollment: 170; 7-12 **Annual Users:** 170

Other Users: 16 small local private and public schools.

Illustrative Applications: Problem-solving for Project PHYSICS.
Drills in SPELLING, GRAMMAR, and FOREIGN LANGUAGES.
EARTH SCIENCE vocabulary.
BIOLOGY SIMULATIONS.
Self-testing AMERICAN HISTORY and PROJECT PHYSICS.

Computer(s): HP 2000 Access

Terminals: 11 interactive

Public Information: Materials available

Contact(s): Edmund Henkels
Coordinator of Computer Activities
St. Anselm's Abbey School
4501 S. Dakota Ave. NE
Washington, DC 20017
(202) 526-0487

Chaminade High School

Reasons for Nomination: Of interest to small schools with little money; program acquaints students with computers as they affect society; program funded by student lab fees; evening courses for adults and hobbyists.

Enrollment: 600 **Annual Users:** 100

Other Users: Adult education; personal computing workshop courses for hobbyists.

Illustrative Applications: Nine week introductory course in computing.
Student programming in many courses.
Uses for small businesses.

Computer(s): WANG 2200 PCS

Terminals: 1 interactive

Contact(s): Bro. Lester Dwyer, Computer Instructor
Chaminade High School
500 Chaminade Drive
Hollywood, FL 33020
(305) 989-5150

Hillsborough County Public Schools

Reasons for Nomination: Faculty interest and involvement; facilities available to all students.

Enrollment: 120,414 **Annual Users:** All (10 high schools)

Other Users: Learning center terminal available to gifted students in elementary through high school.

Illustrative Applications: Student-programmed problem-solving in MATHEMATICS and SCIENCE.

Computer(s): IBM 370/135

Terminals: 25 interactive

Contact(s): Esther Raker
Director of Data Processing
Hillsborough County Public Schools
1407 E. Columbus Drive
Tampa, FL 33605
(813) 247-2191

McArthur High School

Reasons for Nomination: "Real Life" project involving students in vocational and academic program running administrative work, interest in computers generated through this project.

Enrollment: 2,675; 9-12 **Annual Users:** 80

Illustrative Applications: Programming courses in BASIC.
Data entry and application, involving both vocational (operations and programming) and administrative work.

Computer(s): W/NOVA University's DEC 20; Florida Computer Resources DEC PDP 11

Terminals: 6 interactive

Contact(s): Mary Benson, Guidance Director
Elizabeth Allison, Chairman Math Dept.
McArthur High School
6501 Hollywood Blvd.
Hollywood, FL 33024
(305) 983-5300

Atlanta Public Schools

Reasons for Nomination: Large time-sharing network supporting instructional and administrative applications; computer science curriculum; 1% of budget ($221/student) allocated for data processing.

Enrollment: 94,000 **Annual Users:** 8,000; 5-14

Other Users: 2,000 (2 additional school districts, private school, science center)

Illustrative Applications: COMPUTER SCIENCE curriculum including 6 courses in APL for grades 5-14.
Simulations and games in a variety of disciplines.
Generation of all instructional materials for blind students in Braille.

Computer(s): IBM 370/158

Terminals: 120 interactive

Contact(s): Tom McConnell, Director of Data Processing Computer Center
Atlanta Public Schools
218 Pryor Street SW
Atlanta, GA 30303
(404) 659-4714

Chicago Public Schools

Reasons for Nomination: Largest CAI system and Computer Education system in public schools; over 12 years experience in CE and more than 6 years in CAI; rising achievement levels for inner city students; program an integral part of educational process; responsibilities of program assigned to assistant superintendent.

Enrollment: 524,000; K-12 **Annual Users:** 19,000

Illustrative Applications: Drill and practice in READING, LANGUAGE ARTS and MATHEMATICS in 58 elementary schools and 2 high schools.
COMPUTER EDUCATION curriculum for students in 64 high schools and 4 elementary schools.

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Computer(s): IBM 370/155; UNIVAC 1110

Terminals: 1,081 interactive

Contact(s): Rita Cooney, Consultant, CAI
Board of Education
228 N. LaSalle St., Rm. 430
Chicago, IL 60601
(312) 641-4193

Niles Township High School

Reasons for Nomination: Self-developed software for teaching of MATHEMATICS and test generation package; large number of users of system; very cost-effective.

Enrollment: 2,400; 9-12 **Annual Users:** 1,200

Other Users: Two high schools.

Illustrative Applications: Test generation and grading in all disciplines.
On-line and batch problem-solving.
Programming courses in BASIC and FORTRAN.
Guidance Information System (GIS).
Introduction to using batch and computer literacy courses.

Computer(s): DEC PDP 8E

Terminals: 7 interactive

Contact(s): Allan Pasche, Instructor/Computer Coordinator
Niles Township High School
Oakton at Edens
Skokie, IL 60076
(312) 966-3800

Pekin Community High School

Reasons for Nomination: Increasing participation in academic computing; mathematics skill proficiency levels raised via computer.

Enrollment: 3,600; 9-12 **Annual Users:** 130

Illustrative Applications: Problem-solving and tutorial in MATHEMATICS.
Computer literacy.
BUSINESS Data Processing.
Computer Assistance in CHEMISTRY and PHYSICS.

Computer(s): DEC PDP 8E

Terminals: 8 interactive

Contact(s): Richard Barker, Director Computer Science
Pekin Community High School
Area Vocational Center
Pekin, IL 61554
(309) 347-4101

Proviso Township High Schools

Reasons for Nomination: Documented student achievement gains; evaluation studies identify the costs of student failures; have detailed data on computer costs.

Enrollment: 7,800; 9-12 **Annual Users:** 4,000

Illustrative Applications: Remedial CAI in MATHEMATICS.
Computer MATHEMATICS with students learning FORTRAN programming.
Job entry skills course in DATA PROCESSING.
Career Information System (CVIS).

Computer(s): IBM 370/135; IBM System 3

Terminals: 55 interactive

Contact(s): Howard Schumacher, Director, Management Information Services
Proviso Township High Schools
807 South First Avenue
Maywood, IL 60153
(312) 344-7000, Ext. 317

Sacred Heart of Mary High School

Reasons for Nomination: Joint agreement with public school district to use its terminals.

Enrollment: 600 **Annual Users:** 300

Illustrative Applications: Guidance Information System (GIS) used in all guidance classes.

Computer(s): School District No. 214's HP 2000 Access

Contact(s): Trisha Dean, Counselor
Sacred Heart of Mary High School
2800 Central
Rolling Meadows, IL 60008
(312) 392-6880

St. Patrick High School

Reasons for Nomination: Some programming experience for all students; 9-year history; variety of uses throughout the school.

Enrollment: 1,500 **Annual Users:** 1,000

Illustrative Applications:
COMPUTER SCIENCE courses in BASIC and FORTRAN.
Problem-solving experimentation, and simulation in all MATHEMATICS courses.
Test scoring.

Computer(s): DEC PDP 8E

Terminals: 1 interactive

Contact(s):
Kenneth Janowiak, Computer Science Head
St. Patrick High School
5900 W. Belmont
Chicago, IL 60634
(312) 282-8844

Township High School District 214

Reasons for Nomination: Expertise of student programmers; students do administrative programming; computer clubs; terminals loaned to students during vacations; free computer services to public libraries.

Enrollment: 20,000; 9-12 **Annual Users:** 12,000

Other Users: 2 elementary school districts; 2 public libraries.

Illustrative Applications:
PHYSICS laboratory.
Drill and practice for remedial MATHEMATICS.
Programming in BASIC.
Drill and practice in SPANISH.
Guidance Information System (GIS).

Computer(s): HP 2000 Access

Terminals: 54 interactive

Contact(s):
Marvin Christensen, Dist. Coordinator
William Reid, Dist. Coordinator
Township High School District 214
799 W. Kensington Road
Mt. Prospect, IL 60056
(312) 259-5300, Ext. 295 (Dr. Christensen)
(312) 259-5300, Ext. 285 (Mr. Reid)

University High School

Reasons for Nomination: Goal that every student is exposed to the computer; novel approaches to problem-solving.

Enrollment: 150 **Annual Users:** 70

Illustrative Applications:
Student programming in TUTOR.
CAI programs on PLATO.
STATISTICS laboratory grades 11-12.

Computer(s): PLATO system at University of Illinois

Terminals: 1 interactive; access to terminals at University of Illinois

Contact(s):
Paul Mailman, Computer Science Instr.
Peter Kimble
University High School
1210 West Springfield Avenue
Urbana, IL 61801
(217) 333-0150

Metropolitan School District of Washington Township

Reasons for Nomination: Extensive student use, computer program not departmentalized, terminals set up in lab environment allowing maximum utilization.

Enrollment: 3,650; 10-12 **Annual Users:** 1,800; 10-12

Other Users: 8 other school districts.

Illustrative Applications:
Student programming in BASIC and problem-solving.
Computer literacy (self-written text).
Vocational training stressing operations and programming in COBOL, FORTRAN, RPG, BASIC.
CVIS guidance program.

Computer(s): NCR Century 200

Terminals: 12 interactive

Public Information: Brochure available

Contact(s):
Joe Parsons, Director
Computer-Based Instruction
Metropolitan School District of Washington Township
1801 East 86th Street
Indianapolis, IN 46240
(317) 259-5371

Bettendorf High School

Reasons for Nomination: Academic computing use integrated into curriculum; students encouraged to use computers in course work; emphasis on practical applications.

Enrollment: 1,850; 9-12 **Annual Users:** 300

Illustrative Applications:
- Problem-solving (independent use by teachers and students).
- Self-correction of experiment reports.
- Data analysis and simulation in HPP PHYSICS, PSSC PHYSICS, Chem Study CHEMISTRY, and advanced SCIENCE.
- Simulation and drill in ECONOMICS.
- Guidance Information System (GIS).

Computer(s): DEC PDP 8; Area 9 Computer Center's HP 3000

Terminals: 2 interactive

Contact(s): Donald Schaefer, Division leader Mathematics and Science
Bettendorf High School
3333 18th Street
Bettendorf, IA 52722
(319) 355-5381

Garden City Senior High School

Reasons for Nomination: Individualized problems in math and science to fit students' career interests; decreased costs with unique use of key pads rather than terminals.

Enrollment: 1100 **Annual Users:** 800

Illustrative Applications:
- Generation of individual MATHEMATICS and SCIENCE problem sets depending on students' career interests and ability.
- Students use key pads for responses.
- Analyses of pupil performance for instructors.
- Computer programming in BASIC.
- Simulations and games in all academic areas.

Computer(s): DEC PDP 11/10

Terminals: 6 interactive, 18 key pads for student input

Public Information: Brochure available; also slide tape presentation and video presentation.

Contact(s): Stanley Crane, Director
Project MASTER
Garden City Senior High School
Garden City, KS 67846
(316) 276-2547

Manhattan Area Vocational Technical School

Reasons for Nomination: Hands-on experience with various types of computers; application programming stressed; 95% placement record.

Enrollment: 250; 10-12 **Annual Users:** 70

Illustrative Applications:
- Programming and operations in Assembler, COBOL, RPG, FORTRAN IV, PL/1 in COMPUTER SCIENCE.

Computer(s): Kansas State University's IBM 370/158

Terminals: 1 remote batch

Contact(s): John Garwick, Instructor, Data Proc.
Manhattan Area Vocational Tech. School
Wreath and Dickens Ave.
Manhattan, KS 66502
(913) 539-7431

Shawnee Mission Public Schools

Reasons for Nomination: Computer science curriculum for nine years; highly trained faculty; well-documented computer science curriculum; increases in student achievement.

Enrollment: 40,000; K-12 **Annual Users:** 2,000

Illustrative Applications:
- Secondary school COMPUTER SCIENCE curriculum stressing programming in WATFOR, FORTRAN, COBOL, and PL/1
- Drills for elementary and junior high students in MATHEMATICS, READING, and LANGUAGE ARTS.

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Computer(s): IBM 370/138; CCC A16

Terminals: 32 interactive

Contact(s): John Rezac
Mathematics Department Chairman
Shawnee Mission Northwest High School
12701 W. 67th Street
Shawnee Mission, KS 66716

Terry Parks
Director of Mathematics
7235 Antioch
Shawnee Mission, KS 66204
(913) 631-2652 (Mr. Rezac)
(913) 831-1900, Ext. 310 (Dr. Parks)

Wichita Public Schools

Reasons for Nomination: Increases in pupil achievement; cooperative arrangements with university personnel; task force of teachers to increase the use of the educational computer.

Enrollment: 48,000; K-12 **Annual Users:** 5,000

Other Users: One school district, one university.

Illustrative Applications: Programming and problem-solving in ALGEBRA.
Drills for remedial MATHEMATICS.
Simulations in BIOLOGY, PHYSICS, CHEMISTRY.
Guidance system.

Computer(s): HP 2000F; IBM 370/138

Terminals: 48 interactive

Public Information: Educational Computer Newsletter (Monthly)

Contact(s): John Wolverton, Coordinator, Educational Computer
Wichita Public Schools
514 S. Topeka
Wichita, KS 67202
(316) 268-7274

Model Laboratory Middle and High School

Reasons for Nomination: A demonstration school; plans to expand service and knowledge to surrounding school districts; program initiated and sustained by students, faculty, and administration.

Enrollment: 400 **Annual Users:** 150

Other Users: 20/year from Eastern Kentucky University.

Illustrative Applications: Drills in MATHEMATICS for grades 6, 7, and 8.
Introductory programming in BASIC for grades 7-12.
Advanced programming in machine language, FORTRAN, and COBOL for grades 9, 10, 11, and 12.

Computer(s): IBM 1620; access to Eastern Kentucky University's DEC PDP 11/70

Terminals: 3 interactive

Contact(s): William Brown, Computer Teacher
Model Laboratory School
Eastern Kentucky University
Richmond, KY 40475
(606) 622-3766

Rapides Parish School System

Reasons for Nomination: Reading program providing significant achievement gains by students; validated by HEW; program adapted by TITLE I; in-service training for teachers.

Enrollment: 27,000; K-12 **Annual Users:** 4,000

Illustrative Applications: Computer-managed READING project including individual diagnosis and prescription and reporting of student progress at four levels.

Computer(s): UNIVAC 9300

Public Information: Brochure available

Contact(s): Travis E. Funderburk, Asst. Supr.
Rapides Parish School System
P.O. Box 1230
Alexandria, LA 71301
(318) 487-0888

South Portland High School

Reasons for Nomination: Long standing program; first school in state to make large-scale use of computer; spectrum of applications.

Enrollment: 1,155; 10-12 **Annual Users:** 750

Other Users: South Portland City Administration.

Illustrative Applications: Student programming and problem-solving in MATHEMATICS.
Accounting, operations, and programming in COBOL and BUSINESS DATA PROCESSING.
Simulations in SCIENCE and SOCIAL SCIENCE.
Guidance Information System (GIS).

Computer(s): DEC PDP 11/70

Terminals: 11 interactive

Contact(s): Ann Waterhouse, Math and Computer Science
South Portland High School
637 Highland Avenue
South Portland, ME 04106
(207) 767-3266

Baltimore County Public Schools

Reasons for Nomination: Program in mathematics since 1970; computer literacy for junior high; vocational training in business data processing.

Enrollment: 120,000; K-12 **Annual Users:** 3,000; 7-12

Illustrative Applications: Programming in COBOL, RPG, background in computer science, and operations in BUSINESS DATA PROCESSING.
Programming in FORTRAN.
Problem-solving in lab setting via batch for MATHEMATICS.
Students given firm general background in DATA PROCESSING as well as specific employable skills.

Computer(s): Three Memorex 50; IBM 1130

Public Information: Literature on math program available

Contact(s): Paul Plevyak, Coordinator
Office Business Education
Stanley A. Smith, Coordinator
Office of Mathematics
Baltimore County Public Schools
6901 North Charles Street
Towson, MD 21204
(301) 494-4219 (Mr. Plevyak)
(301) 494-4052 (Mr. Smith)

Howard Vocational Technical Center

Reasons for Nomination: Excellent job placement rate; articulation agreement with Howard Community College giving 9 credits for work done at the Center; local funding.

Enrollment: 1,041; 9-12 **Annual Users:** 120

Other Users: Various small businesses in Howard County.

Illustrative Applications: COBOL programming and computer operations in DATA PROCESSING.

Computer(s): Honeywell 200, UNIVAC 9200; IBM 370/125; North Arundel's HP 3000; Essex Community College's HP 2000

Terminals: 1 interactive

Contact(s): Max A. Smith
Vocational Education Supervisor
Howard County Public Schools
8045 Route No. 32
Columbia, MD 21044
(301) 531-5744

Joseph Ramach
Specialist in Business Education and Data Processing
Maryland State Dept. of Education
P.O. Box
Baltimore-Wash. Int. Airport, MD 21240
(301) 796-8300

Montgomery County Public Schools

Reasons for Nomination: Locally funded program; academic computing since 1968; developed mathematics curriculum; large teacher training program; administrative support; student achievement gains.

Enrollment: 117,000 **Annual Users:** 12,500

Other Users: Montgomery College

Illustrative Applications:
Diagnostic drill and practice in MATHEMATICS for grades 3-7.
Student programming in BASIC and FORTRAN.
Locally developed computer-managed instructional system in Mathematics (ISM) for MATHEMATICS curriculum assessment in grades K-8.
Tutorial SCIENCE career awareness program.

Computer(s): IBM 370/158

Terminals: 85 interactive

Public Information: Information available

Contact(s):
Catherine Morgan, Acting Director
Dept. of Curriculum & Instruction
Beverly Sangston, Acting Director
Div. of Computer-Related Instruction
Montgomery County Public Schools
850 Hungerford Drive
Rockville, MD 20850
(301) 279-3161 (Ms. Morgan)
(301) 279-3321 (Ms. Sangston

Prince Georges County Public Schools

Reasons for Nomination: Wide spectrum of students exposed to computer (elementary to high school); stress in vocational program in providing marketable skills to students; strong administrative support.

Enrollment: 140,000; K-12 **Annual Users:** 20,000

Illustrative Applications:
Drill and practice, simulation, and problem-solving in MATHEMATICS, PHYSICS, BIOLOGY, and SCIENCE.
BUSINESS application courses.
Vocational data processing courses.
Programming courses in BASIC, FORTRAN, COBOL, RPG 2.
Career Information System.

Computer(s): Two HP 2000 Access; HP 3000

Terminals: 145 interactive

Contact(s):
Daniel Chase, Coordinator
Instructional Data Systems
Prince Georges County Public Schools
Instructional Services Building
Upper Marlboro, MD 20870
(301) 952-4571

Western Vocational Technical High School

Reasons for Nomination: Career-oriented data processing curriculum; excellent job placement rate; college credit received for data processing courses.

Enrollment: 1,500; 10-12 **Annual Users:** 250

Other Users: Dulaney High School

Illustrative Applications:
Programming and application.
COBOL and RPG.
Computer operation training.

Computer(s): Memorex 50

Terminals: 1 interactive

Public Information: Brochure available

Contact(s):
Ken Epler
Dept. Chairman, Data Processing
Western Vocational-Technical High School
100 Kenwood Avenue
Baltimore, MD 21228
(301) 788-6080

Billerica High School

Reasons for Nomination: Data processing program operational since 1968; large number of teachers developing curricula; town's programming needs become class projects (e.g., census).

Enrollment: 2,400 **Annual Users:** 450

Other Users: Town and neighboring schools.

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Illustrative Applications: DATA PROCESSING curriculum where students learn to use a wide variety of computer equipment.
COMPUTER SCIENCE courses teaching FORTRAN programming.
Guidance Information System (GIS).
Computer MATHEMATICS emphasizing problem-solving for advanced students.

Computer(s): IBM 1130; Honeywell 700; access to DEC PDP 10

Terminals: 2 interactive

Contact(s): Adam Wasylyshyn, Director of Data Processing
Billerica High School
River Street
Billerica, MA 01821
(617) 667-7570

Blue Hills Region Technical Institute

Reasons for Nomination: Variety of services; course development; emphasis on locally-developed software; good employment placement record; pioneer in regional computing.

Enrollment: 450 **Annual Users:** 70

Other Users: 21 other schools.

Illustrative Applications: Programming and DATA PROCESSING courses, both graduate and high school, in RPG, COBOL, FORTRAN, BAL.
Problem-solving.

Computer(s): IBM 370/138

Terminals: 6 interactive

Contact(s): Don Ryley, Data Processing Manager
Blue Hills Region Tech. Institute
100 Randolf Street
Canton, MA 02021
(617) 828-5800

Boston Children's Museum

Reasons for Nomination: Provides an introduction to computing in a non-threatening environment; children and adults can see the entire process, touch the computer; heavily visited exhibit; computers used throughout the institution to support educational activities.

Annual Users: 180,000 all ages

Other Users: Other local museums and cultural organizations.

Illustrative Applications: Computer terminals in the exhibit area provide introduction to computing with games, simulations.
Voice synthesis.
Computer-controlled turtle.
Field trips introducing kids to computers.
Computer monitoring energy and environment in other areas of the museum.

Computer(s): DEC PDP 11/40; 2 DEC LSI-11

Terminals: 15 interactive

Public Information: Limited information available

Contact(s): Bill Mayhew, Director of Computer Center
The Children's Museum
The Jamaicaway
Boston, MA 02130
(617) 522-4800

Boston Public Schools

Reasons for Nomination: Students use a computer with many resources, e.g., file storage; access to all languages for advanced students.

Enrollment: 75,000 **Annual Users:** 2,000

Illustrative Applications: Instruction in BASIC and FORTRAN.

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Computer(s): IBM 370/145; IBM 1130; DEC PDP 8

Terminals: 30 interactive

Contact(s): James Dailey, Director, Data Processing Center
Boston Public Schools
205 Townsend Street
Dorchester, MA 02121
(617) 445-4155

Brockton High School

Reasons for Nomination: Large number of student users in many disciplines.

Enrollment: 5,900 **Annual Users:** 1,200

Illustrative Applications: DATA PROCESSING for business students.
Student programming and problem-solving in MATHEMATICS and SCIENCE.
Simulations in SCIENCE, SOCIAL SCIENCE, ECOLOGY.

Computer(s): DEC PDP 8E; UNIVAC 9480

Terminals: 7 interactive

Contact(s): Arthur M. Bromfield, Director of Data Processing
Brockton High School
700 Belmont Street
Brockton, MA 02401
(617) 588-7800, Ext. 628

Brookline High School

Reasons for Nomination: Fully integrated program in mathematics at 9th and 10th grade levels; a Project LOCAL school.

Enrollment: 2,000; 9-12 **Annual Users:** 900

Other Users: 110 8th graders from neighboring elementary schools.

Illustrative Applications: Problem-solving and student programming in ALGEBRA and GEOMETRY.
Data processing with programming in COBOL and FORTRAN.
Computer science for 12th grade.
Problem-solving in SCIENCE for grades 9 through 11.

Computer(s): IBM 1130; IBM 370 shared with community

Terminals: 13 interactive

Public Information: Catlin Report—Study of how the community can best make use of its computer resources. Order from:
Dr. Ferdy Tagle
Assistant Superintendent for Funds and Facilities
Brookline High School

Contact(s): George Caruso
Director of Mathematics
Brookline High School
88 Harvard Street
Brookline, MA 02146
(617) 734-1111

Framingham Public Schools

Reasons for Nomination: Evening adult education program; on-the-job training for students.

Enrollment: 13,500 **Annual Users:** 700

Illustrative Applications: Introductory and advanced courses in BASIC programming.
Applications for ACCOUNTING and other BUSINESS courses.
Simulations and personality analysis in SOCIAL SCIENCES.

Computer(s): Two DEC PDP 8E

Terminals: 26 interactive

Contact(s): Bernard Redgate, Computer Director
Framingham Public Schools
64 Prior Drive
Framingham, MA 01701
(617) 877-4816

Hull High School

Reasons for Nomination: Curriculum in data processing career orientation offered at freshman through senior levels.

Enrollment: 1,050; 9-12 **Annual Users:** 200

Illustrative Applications:
Introductory data processing course for grade 9.
Introductory programming in RPG and COBOL for grades 10-11.
Computer programming in advanced RPG and COBOL and computer systems design for grade 12.
Student programming in BASIC, FORTRAN, and APL in MATHEMATICS.

Computer(s): IBM 1130

Public Information: "Career Programs," *Kaleidoscope 17,* Fall 1976

Contact(s):
James J. Nolan
Data Processing Coordinator
Hull High School
180 Main Street
Hull, MA 02045
(617) 925-3000

Lee High School

Reasons for Nomination: Incorporation of computer into total mathematics program; facilities available to all students.

Enrollment: 600 **Annual Users:** 250

Illustrative Applications:
Student-programmed problem-solving in MATHEMATICS and BUSINESS.
Simulations and games in MATHEMATICS, BIOLOGY, SCIENCE, SOCIAL SCIENCE, and BUSINESS.

Computer(s): Wang 2200

Terminals: 1 interactive

Contact(s):
Thomas Cinella, Computer Coordinator
Math Department
Lee High School
Greylock Street
Lee, MA 01238
(413) 243-2100

Lexington High School

Reasons for Nomination: Pioneer in educational use of the computer; program began 1965.

Enrollment: 1,970 **Annual Users:** 1,200

Other Users: Two elementary schools; three junior high schools.

Illustrative Applications:
Elementary school programming.
Student programming in MATHEMATICS.
Comprehensive program in SCIENCE including test data bank.

Computer(s): DEC PDP 8I; DEC PDP 11/40

Terminals: 21 interactive

Contact(s):
Walter Koetke, Director
Computer Services
Lexington High School
251 Waltham Street
Lexington, MA 02173
(617) 862-7500, Ext. 251

Methuen High School

Reasons for Nomination: Students manage computer center and program school administrative applications; community support; students design microcomputers.

Enrollment: 2,000; 9-12 **Annual Users:** 200

Illustrative Applications:
Problem-solving of business and industrial problems in MATHEMATICS.
Problem-solving in STATISTICS.
Student design of microcomputers in COMPUTER SCIENCE.

Computer(s): Wang 2200

Terminals: 2 interactive

Contact(s):
David Clayman, Housemaster
Math Coordinator
Methuen High School
One Ranger Road
Methuen, MA 01844
(617) 687-8080

Middlesex School

Reasons for Nomination: Academic computing since 1967; large proportion student participation; required computer literacy course; students teach courses and work as programmers; outreach to New England secondary school teachers; one of the first private schools to offer computer science.

Enrollment: 295; 9-12 **Annual Users:** 100

Illustrative Applications: Computer literacy.
Problem-solving in BASIC, COMPUTER SCIENCE.
Systems programming in BASIC PLUS.

Computer(s): DEC PDP 11/40

Terminals: 5 interactive

Contact(s): Edwin R. Sage, Head
Computer Science
Middlesex School
1400 Lowell Road
Concord, MA 01742
(617) 369-2550

Nashoba Valley Technical High School

Reasons for Nomination: High utilization of computer in curriculum; high turnover rate for problem solutions and drills.

Enrollment: 650; 9-12 **Annual Users:** 325

Other Users: Four other high schools.

Illustrative Applications: Computer science, programming in BASIC, COBOL, FORTRAN, RPG.
Assembler and operations.
Tutorials in English.
Drill and practice in MATHEMATICS and remedial READING.
Guidance Information System (GIS).

Computer(s): Two HP 2000F

Terminals: 18 interactive

Public Information: Public information packet available

Contact(s): Joseph Danahy, Coordinator
Data Processing
Nashoba Valley Technical High School
100 Littleton Road
Westford, MA 01902
(617) 692-4711

Newton North High School

Reasons for Nomination: Experience in computing since 1960; open to community; adult education program; teacher training; students develop programs for the community; students built their own computer in 1960.

Enrollment: 2,600 **Annual Users:** 1,800

Other Users: Newton South High School.

Illustrative Applications: Computer-oriented ACCOUNTING.
Business DATA PROCESSING and COMPUTER SCIENCE curricula.
Problem-solving in MATHEMATICS.
Simulations in SOCIAL STUDIES.

Computer(s): DEC PDP 11/40

Terminals: 8 interactive

Contact(s): Rudy Satlak, Bus. Educa. Instructor
Paul Shapiro, Coordinator of Instructional Data Processing
Newton North High School
363 Howell
Newtonville, MA 02160
(617) 964-9810

Northfield Mt. Hermon School

Reasons for Nomination: Computer accessable to students; flexible policy on computer applications.

Enrollment: 1,100; 9-12 **Annual Users:** 270

Other Users: Four other district high schools.

Illustrative Applications: Programming in BASIC plus COMPUTER SCIENCE course.
Simulations in SCIENCE and SOCIAL SCIENCES.
Drill and practice in MATHEMATICS and MODERN LANGUAGES.
Individual student problem-solving.

Computer(s): DEC PDP 11/45

Terminals: 25 interactive plus Hewlett-Packard Plotter

Public Information: School Admissions Catalog and Course of Study Guide

Contact(s): Jay Estabrook, Director
Computing Center
Northfield Mt. Hermon School
East Northfield, MA 01360
(413) 498-2988

Quincy Public Schools

Reasons for Nomination: Locally written CMI program; two-year data processing program offered.

Enrollment: 17,000; K-14 **Annual Users:** 500; 11-14

Illustrative Applications: Business administration.
CMI based on curriculum performance.
Two-year DATA PROCESSING program for grades 11-12.
Two-year COMPUTER SCIENCE for Associate in Science Degree.

Computer(s): Honeywell 6420

Terminals: 4 interactive

Contact(s): Robert Brennen, Director
Data Processing
Quincy Public Schools
107 Woodward Avenue
Quincy, MA 02169
(617) 417-0100

Springfield Public School

Reasons for Nomination: Large computer for a primary-secondary school system; locally-developed software; system strictly educational.

Enrollment: 31,000; K-12 **Annual Users:** 3,500; 5-12

Other Users: 7 adult learning center installations in Massachusetts.

Illustrative Applications: GISS in Algebra II.
Problem-solving, simulation, demonstration, and drill and practice in MATHEMATICS.
Guidance Information System (GIS).
Prescription testing and assignment in adult learning centers.

Computer(s): DEC PDP 11/50

Terminals: 52 interactive

Contact(s): Philip Halloran, Math Supervisor
Springfield Public School
195 State Street
Springfield, MA 01103
(413) 733-2132

Wellesley Junior High School

Reasons for Nomination: Individualized curriculum in programming; dynamic curriculum being continually improved.

Enrollment: 1,350 **Annual Users:** 250

Illustrative Applications: Three courses in BASIC programming with applications primarily in MATHEMATICS.

Computer(s): Project LOCAL's DEC PDP 8E

Terminals: 5 interactive

Contact(s): Henning Sahlberg, Mathematics Department Head
Wellesley Junior High School
50 Kingsbury Street
Wellesley, MA 02181
(617) 235-7250

Westfield Public Schools

Reasons for Nomination: Long-standing program; goal to have computerized assessment system for all subject areas, K-12; research and development on uses of computer for the handicapped.

Enrollment: 7,000; K-12 **Annual Users:** 3,000; 6-12

Illustrative Applications: Criterion referenced testing system for MATHEMATICS in grades 4-9, SCIENCE 4-5.
Guidance Information System (GIS).
Computer literacy, BASIC and independent study for high school students in COMPUTER SCIENCE.

Computer(s): DEC PDP 11/50

Terminals: 33 interactive

Public Information: WHIPS/11 newsletter

Contact(s): Wilfred Paquin, Director
Computer Center
Westfield Public Schools
177 Montgomery Avenue
Westfield, MA 01085
(413) 568-3336

West Springfield Public High School

Reasons for Nomination: Active student participation in system operation; 7 years' experience; administrative programs written by students.

Enrollment: 2,000 **Annual Users:** 420

Other Users: Two junior high schools.

Illustrative Applications: Programming in BASIC.
Drill and practice, simulation in PHYSICS, BIOLOGY, and CHEMISTRY.
Program for physically or mentally retarded students.
Guidance Information System (GIS).

Computer(s): DEC PDP 11/40

Terminals: 11 interactive

Public Information: "W. Springfield Computer Club News."

Contact(s): Jim Choate, Program Director
West Springfield Public High School
425 Piter Road
W. Springfield, MA 01819
(413) 732-4147

Adlai Stevenson High School

Reasons for Nomination: Academic computing since 1969-70; all mathematics staff trained in programming; developed curricular materials that enables 1600 students to use small system.

Enrollment: 2,100; 10-12 **Annual Users:** 1,600

Illustrative Applications: Computer generation of classroom support materials.
BASIC programming with independent study for advanced students' in COMPUTER SCIENCE.
GUIDANCE information retrieval system.

Computer(s): Macomb County's 5 HP 2000 Access; IBM 370

Terminals: 8 interactive

Contact(s): William Esehenburg
Mathematics Department Chairman
Adlai Stevenson High School
39701 Dodge Park Road
Sterling Heights, MI 48087
(313) 268-4700, Ext. 53

Capital Area Career Center

Reasons for Nomination: Computer-managed career curriculum; individualized, competency-based computer-managed instruction system; teachers freed from most paper work; mainstreaming of handicapped students with regular students.

Annual Users: 850

Users: 11 school districts

Illustrative Applications: Evaluation of student needs vs. the goals they have set.
Individually scheduling students' courses.
Task analysis of job areas to determine skills students will need.
Provide employers with computer listing of each skill mastered by student.

Computer(s): IBM 360; INGHAM (host site for network)

Terminals: 1 remote batch

Public Information: Brochure

Contact(s): Janice R. Danford, Director
Capital Area Career Center
611 Hagadorn Road
Mason, MI 48854
(517) 676-3303

Livonia Public Schools

Reasons for Nomination: Academic computing since 1963; continued growth of computing curriculum; adult evening program.

Enrollment: 30,000; K-12 **Annual Users:** 2,100; 10-12

Illustrative Applications: COMPUTER MATH courses in BASIC programming and problem-solving.
Course in BUSINESS DATA PROCESSING.
Computer literacy course.
Problem-solving in ALGEBRA II.

Computer(s): Wayne County's HP 2000 Access; IBM 370/158

Terminals: 16 interactive; 4 remote batch

Contact(s): James Winebrener, Computer Education Specialist
Livonia Public Schools
15125 Farmington
Livonia, MI 48184
(313) 422-1200, Ext. 418

Oakland School District

Reasons for Nomination: Model of instructional management; expanding number of users; development of instructional kits; evaluation of student achievement; increased teacher productivity.

Enrollment: 21,000 **Annual Users:** 5,000

Illustrative Applications:
Computer-managed objective-referenced assessment model for grades K-6 in READING and MATHEMATICS.
Computer-managed instruction for grades 7-10.
Computer awareness for high school students.

Computer(s): IBM 370

Public Information: Oakland Schools Report (newsletter)

Contact(s):
Anna Chandler
Project PERFORM Director
Oakland School District
44 State Street
Pontiac, MI 48053
(313) 857-8330

Waterford Public School District

Reasons for Nomination: Originally funded by NDEA, has been locally funded for 5 years; elementary school cost-effectiveness and achievement study under way; adult education has its own "high school."

Enrollment: 17,600 **Annual Users:** 3,000 - 4,000

Other Users: 500-1000 adult education students.

Illustrative Applications:
Introduction to DATA PROCESSING, K-adult.
Student programming of drills in MATHEMATICS, LANGUAGE ARTS, READING, and SPELLING.
Computing literacy program.
Computer Managed Instruction.

Computer(s): UNIVAC Spectra 70/45; UNIVAC 70/1600

Terminals: 33 interactive at 15 locations

Public Information: Brochure describing program

Contact(s):
Nicholas A. Menghini
Director of Data Processing
Waterford Public School District
1325 Crescent Lake Road
Waterford, MI 48054
(313) 674-4756

Anoka-Hennepin District No. 11

Reasons for Nomination: Expanding interdisciplinary uses of computer; computer integrated throughout math curriculum; active computer clubs.

Enrollment: 36,000; K-12 **Annual Users:** 8,000-10,000

Illustrative Applications:
Problem-solving in GEOMETRY, ALGEBRA and ELEMENTARY FUNCTIONS.
Programming for elementary, junior, and senior high students.
Simulations and analysis of lab data in SCIENCE, SOCIAL STUDIES, and HOME ECONOMICS.
Guidance Information System (GIS).

Computer(s): TIES, MECC

Terminals: 12 interactive

Public Information: TIES Timely Topics and USERS

Contact(s):
Roger Larson, Secondary Mathematics Consultant
Anoka-Hennepin District No. 11
1299 Hanson Blvd. NW
Coon Rapids, MN 55433
(612) 755-8220

Burnsville Ind. School District No. 191

Reasons for Nomination: Assistance given to teachers and staff; special program for handicapped students; teacher participation; spectrum of applications; developed curriculum packages available nationally.

Enrollment: 11,000 **Annual Users:** 7,500

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Illustrative Applications: Problem-solving.
Simulations in BUSINESS, ECONOMICS, SCIENCE, and SOCIAL SCIENCES.
Drill and practice in MATHEMATICS and ENGLISH.
Tutorial in COMPUTER SCIENCE (BASIC).
Computer appreciation courses in elementary grades.
Guidance Information System (GIS).

Computer(s): TIES, MECC

Terminals: 30 interactive

Contact(s): Robert Scheuble, Director, Data Processing & Federal Programs
Burnsville Ind. School District No. 191
P.O. Box 1094
Burnsville, MN 55337
(612) 894-1111

Holdingford High School

Reasons for Nomination: Rural district with spectrum of applications; students assist teachers in developing new applications programs.

Enrollment: 573; 7-12 **Annual Users:** 350

Illustrative Applications: Courses teaching students programming in BASIC and FORTRAN.
Food analysis program in HOME ECONOMICS.
Simulations in SOCIAL STUDIES.
Occupational Information System

Computer(s): MECC

Terminals: 2 interactive

Contact(s): Roger Doucet, Curriculum Director
Holdingford High School
Holdingford, MN 56340
(612) 746-2111

Hopkins Public Schools (District 274)

Reasons for Nomination: Computer used achievement evaluation of students and courses; students show significant improvement in such courses; developed several exemplary programs and manuals for grades 4-8.

Enrollment: 8,500; K-12 **Annual Users:** 5,000; 3-12

Illustrative Applications: Comprehensive Achievement Monitoring (CAM).
CAI in SCIENCE, SOCIAL SCIENCES, and MATHEMATICS.
Guidance Information System (GIS).

Computer(s): TIES, MECC

Terminals: 11 interactive; 1 remote batch

Contact(s): Donald Sension, Coordinator
Research, Evaluation, & Information Systems
Hopkins Public Schools
1001 Highway 7
Hopkins, MN 55343
(612) 546-2451

Hubert Olson Junior High School

Reasons for Nomination: Individualized computer literacy program; diversity of student options; student grouping, staffing aided by computer technology.

Enrollment: 1,450 **Annual Users:** 150

Illustrative Applications: Individualized packet for learning to use the computer terminal and learning BASIC programming.
In-depth programming courses in summer school for both elementary and high school students.

Computer(s): TIES

Terminals: 1 interactive

Public Information: TIES Timely Topics (newsletter)

Contact(s): Norm Prins, Chairman Math Dept.
Donald Ficks, Director of Pupil Personnel Services
Hubert Olson Junior High School
4551 West 102nd Street
Bloomington, MN 55431
(612) 831-2571

Lincoln High School

Reasons for Nomination: Open computer lab serving a spectrum of curricula, classes, and individuals; goal that all students use a computer before graduation; program began in 1970.

Enrollment: 1,800 **Annual Users:** 900

Other Users: Guidance department using various guidance and occupational information system with students.

Illustrative Applications: Individualized activities for students to learn BASIC.
Simulations, data analysis, and drills in CHEMISTRY, PHYSICS, BIOLOGY, SOCIAL STUDIES.
Simulations in BUSINESS management.
FOREIGN LANGUAGE drills.

Computer(s): TIES

Terminals: 7 interactive

Public Information: TIES Timely Topics (newsletter)

Contact(s): James Burke, Science Div. Director
Lincoln High School
8800 Sheridan Ave. South
Bloomington, MN 55431
(612) 881-5891

Lindbergh Senior High School

Reasons for Nomination: Computer-managed instruction.

Enrollment: 1,270; 10-12 **Annual Users:** 500

Illustrative Applications: Computer-managed instruction and evaluation system (CAM).
Guidance Information System (GIS).
Computer-generated schedules and attendance procedure.

Computer(s): TIES

Terminals: 3 interactive

Contact(s): John Erickson, Coordinator
Data Processing Services
Lindbergh Senior High School
2400 Lindbergh Drive
Minnetonka, MN 55343
(612) 546-2451

Maple Lake High School

Reasons for Nomination: Rural school with dynamic computing program; teacher interest and participation; all students required to take background courses in computers; active use of CAI in classroom; computer used in all discipline areas.

Enrollment: 500; 7-12 **Annual Users:** 425

Illustrative Applications: Computer literacy courses for all students.
Simulation, drill, and problem-solving in SCIENCE, SOCIAL STUDIES, ENGLISH and MATHEMATICS.

Computer(s): MECC

Terminals: 2 interactive

Contact(s): Mary James, Educational Computer Services Coordinator
Maple Lake High School
133 Moland Avenue
Maple Lake, MN 55358
(612) 963-3171

Marshall-University High School

Reasons for Nomination: Faculty-developed problem-solving materials in mathematics; faculty outreach to area elementary schools; long history of academic computing.

Enrollment: 500; 10-12 **Annual Users:** 125

Other Users: 10-12 selected junior high school students.

Illustrative Applications: Student-programmed problem-solving exercises in MATHEMATICS.
Simulations in BUSINESS.

Computer(s): MECC; TIES

Terminals: 3 interactive

Contact(s): John Walther, Math Instructor
Marshall-University High School
1313 S.E. 5th Street
Minneapolis, MN 55414
(612) 378-1824

Poplar Bridge Elementary School

Reasons for Nomination: Resource center for instruction and enrichment in mathematics, reading, language arts, social studies, and science.

Enrollment: 600; K-6 **Annual Users:** 450

Illustrative Applications: Drill and practice in MATHEMATICS.
Spelling and phonics program for children, with learning problems.
Computer literacy lessons.
Educational computer games.

Computer(s): TIES, MECC

Terminals: 2 interactive

Public Information: TIES Timely Topics

Contact(s): George Hafertepe, Terminal Supervisor
Richard Fawver, Principal
Poplar Bridge Elementary School
8401 Palmer Road
Bloomington, MN 55437
(612) 831-2291

Portland Junior High School

Reasons for Nomination: Self-paced instruction in terminal use and programming; students allowed early contact with computers.

Enrollment: 1,260; 7-9 **Annual Users:** 200; 7-9

Illustrative Applications: Tutorial CAI to teach programming and terminal use.

Computer(s): TIES, MECC

Terminals: 3 interactive

Contact(s): Roger Nelson, Mathematics Dept.
Portland Junior High School
8900 Portland Avenue, South
Bloomington, MN 55420
(612) 888-4601

Rochester Public Schools

Reasons for Nomination: Programming curriculum; increasing enrollments in programming courses; model elementary school program.

Enrollment: 12,000; K-12 **Annual Users:** 2,000

Illustrative Applications: Programming in BASIC for high school students.
Problem-solving in junior high MATHEMATICS.
Simulations in SOCIAL STUDIES.
Package of AGRICULTURE programs.

Computer(s): MECC

Terminals: 14 interactive

Contact(s): Mahlon Wissink, Science Consultant
E.M. Walton, Assistant Supervisor
Coffman Building
Rochester Public Schools
ESC Building - Ind. School Dist. 535
Rochester, MN 55901
(507) 285-8732

St. Paul Public Schools

Reasons for Nomination: Spectrum of applications; ten-year history; teacher training programs; realistic attitude about seeking funds; maximum utilization of facilities.

Enrollment: 40,000 **Annual Users:** 30,000

Illustrative Applications: COMPUTER SCIENCE curriculum.
Problem-solving in MATHEMATICS, grades 7-12.
Materials generation and testing in MATHEMATICS, grades 1-12.
Remedial drill and practice in MATHEMATICS and READING.
Simulations in SCIENCE and SOCIAL STUDIES.
Gaming in READING and MATHEMATICS, grades 3-6.
Guidance Information System for counselors and students (GIS and MOIS).

Computer(s): MECC

Terminals: 65 interactive

Public Information: Information available

Contact(s): Charles Lund, Supervisor of Math.
Manager of Computer Time-Sharing
St. Paul Public Schools
360 Colborne
St. Paul, MN 55102
(612) 278-5687

Southeast Free School

Reasons for Nomination: Computer applications support a locally individualized curriculum; CAI a learning alternative in the mathematics program.

Enrollment: 175; K-12 **Annual Users:** 85

Illustrative Applications:
Simulations in SCIENCE and SOCIAL STUDIES.
Drills in MATHEMATICS, grades K-12.
Gaming.

Computer(s): TIES, MECC

Terminals: 1 interactive

Contact(s):
Rich Osterberg, Mathematics Teacher
Southeast Free School
915 Dartmouth SE
Minneapolis, MN 55414
(612) 331 4318

Southwest High School

Reasons for Nomination: Inservice training for Minneapolis teachers; large percentage of students using computers; studies on the effects of students learning to solve problems using computers; summer programs for advanced students.

Enrollment: 1,650; 7-12 **Annual Users:** 700

Illustrative Applications:
Problem-solving tool in MATHEMATICS, grades 7-12.
Simulations and canned programs in MATHEMATICS.
Guidance Information System (GIS).

Computer(s): HP 2000C; MECC

Terminals: 5 interactive

Contact(s):
Edwin Andersen, Math Dept. Chairman
Gordon Halloran, Mathematics Teacher
Southwest High School
3414 W 47th Street
Minneapolis, MN 55410
(612) 926-1811

Spring Lake Park Junior High School

Reasons for Nomination: Junior high computer literacy curriculum; developed curricular materials.

Enrollment: 630 **Annual Users:** 300

Illustrative Applications:
Computing literacy curriculum for all 8th grade students.
Career information in SOCIAL STUDIES classes.
Remedial MATHEMATICS for 7th grade students.

Computer(s): TIES

Terminals: 1 interactive

Public Information: TIES Timely Topics (newsletter)

Contact(s):
Merdyce Fox, Math Dept. Chairman
Spring Lake Park Junior High School
8000 Highway No. 65
Minneapolis, MN 55432
(612) 786-4250

Stillwater Senior High School

Reasons for Nomination: Long-standing program; support from school board; faculty inservice training in computer literacy a regular part of staff development; developed materials in language arts.

Enrollment: 1,946 **Annual Users:** 200

Illustrative Applications:
Tutorials in ENGLISH.
Student programming classes.
BIOLOGY projects.
Guidance Information System (GIS).

Computer(s): TIES, MECC

Terminals: 9 interactive

Public Information: TIES Timely Topics (newsletter)

Contact(s):
Lowell Watson, Math/Computer Science Teacher
Stillwater Senior High School
523 West Marsh Street
Stillwater, MN 55082
(612) 439-5160

Suburban Hennepin County Area Vocational Tech. Schools

Reasons for Nomination: Problem-solving incorporated into a wide range of courses; individual use of computer by students encouraged.

Enrollment: 1,400 Total **Annual Users:** 350

Illustrative Applications: Programming taught in COBOL, FORTRAN, BASIC, RPG, Assembler.
Problem-solving and simulation in ELECTRONICS, BUSINESS, MARKETING, and POWDERED METALS ENGINEERING.

Computer(s): Access to University of Minnesota, TIES and MECC networks

Terminals: 1 interactive

Contact(s): Thomas Konrad, Data Proc. Instructor
Suburban Hennepin County Area Vocational Schools
9000 North 77th Avenue
Brooklin Park, MN 55445
(612) 944-2222

White Bear Lake/Mariner High School

Reasons for Nomination: Computer programming integral part of mathematics curriculum; well-established operational computer curriculum; faculty encouraged to use computer.

Enrollment: 2,800 **Annual Users:** 400

Illustrative Applications: Problem-solving an integrated tool in MATHEMATICS.
Simulations in SCIENCE, BUSINESS and DATA PROCESSING.
Business Data Processing curriculum.

Computer(s): TIES

Terminals: 10 interactive

Public Information: Information available from Data Processing Coordinator/Mariner High School

Contact(s): Tom Tucker
Math Dept. Chairman
Mariner High School
3551 McKnight Road
White Bear Lake, MN 55110
(612) 429-5391

School District of Kansas City

Reasons for Nomination: Developed and distributed mathematics curriculum; achievement gains from using CAI mathematics; extensive evaluation; cost accounting data on CAI program.

Enrollment: 51,000; K-12 **Annual Users:** 1,000

Illustrative Applications: CAI MATHEMATICS for junior high school students, remedial and enrichment lessons.

Computer(s): IBM 370/135

Terminals: 23 interactive

Contact(s): Thomas A. Hartley, Jr., CAI Coordinator
School District of Kansas City
7618 Wyandotte Street, Room 214
Kansas City, MO 64114
(816) 363-4482

Westside Community Schools (District No. 66)

Reasons for Nomination: Emphasis on computer availability to students and teachers; extensive use of CAI.

Enrollment: 8,600; K-12 **Annual Users:** 1,100;

Illustrative Applications: CAI in AMERICAN HISTORY, PHYSICS, ECONOMICS, BIOLOGY, ARITHMETIC and READING.
Programming classes in BASIC and FORTRAN.
Programming CMI system in PHYSICS.

Computer(s): ESU No. 6's; DEC PDP 10

Terminals: 7 interactive

Contact(s): Chuck Lang
Science Department Chairman
Westside High School
8701 Pacific Street
Omaha, NE 68144
(402) 391-1266

Lawrenceville School

Reasons for Nomination: Pedogogical approach of having students write their own simulation programs, improving grasp of ideas.

Enrollment: 750; 8-12 **Annual Users:** 250

Illustrative Applications: Student-written simulations in PHYSICS, CHEMISTRY, and SOCIAL SCIENCE.
Programming and problem-solving in MATHEMATICS.

Computer(s): DEC PDP 11/40

Terminals: 8 interactive

Public Information: Textbook: "A Guide to Programming in BASIC Plus."

Contact(s): Bruce Presley, Director
Computer Science
Lawrenceville School
Lawrenceville, NJ 08648
(609) 896-0400

Manalapan-Englishtown Regional Elementary Schools

Reasons for Nomination: Large application base for an elementary district; in-house development of test construction program.

Enrollment: 4,500; K-8 **Annual Users:** All

Other Users: Frehold Regional School District.

Illustrative Applications: Computer-assisted test construction.
Criterion-based testing in MATHEMATICS (CREAM).

Computer(s): IBM 360/30

Contact(s): Kenneth Kayser, Director
Data Processing
Manalapan-Englishtown Regional Elementary Schools
Englishtown, NJ 07726
(201) 446-7766

Morris Hills Regional School District

Reasons for Nomination: Data processing program in operation 16 years; every student has computer experience; courses of computer study developed for each math course; job placement in computer industry.

Enrollment: 3,800; 9-12 **Annual Users:** 700

Illustrative Applications: Problem-solving in TRIGONOMETRY, ALGEBRA, and GEOMETRY.
Computer programming in FORTRAN.
BUSINESS applications in RPG.

Computer(s): Two IBM 1130s

Contact(s): Stanley Berger, Math Teacher
Morris Knolls High School
MTD Route 3 Knoll Drive
Denville, NJ 07834

James Coleman, Business Teacher
Morris Hills High School
West Main Street
Rockaway, NJ 07866
(201) 627-3528, Ext. 49 (Mr. Berger)
(201) 627-3500 (Mr. Coleman)

Northern Highlands Regional High School

Reasons for Nomination: Hands-on computer experience for students; computer productivity.

Enrollment: 1,500 **Annual Users:** 150

Illustrative Applications: Three courses in COMPUTER SCIENCE concentrating on programming in two languages.
Advanced course in COMPUTER MATH LOGIC and CIRCUITRY DESIGN.

Computer(s): IBM 1130

Contact(s): Donald Viglione, Director of Data Processing
Northern Highlands Regional High School
Hillside Avenue
Allendale, NJ 07401
(201) 327-8700

Ridgewood High School

Reasons for Nomination: Trained, involved staff; one computer dedicated to instruction; adult education and continuing school programs; spectrum of applications.

Enrollment: 1,700 **Annual Users:** 1,500

Other Users: One elementary, two junior highs in district.

Illustrative Applications:
COMPUTER SCIENCE curriculum with instruction in BASIC, FORTRAN, and operations.
Remedial MATHEMATICS for grades 7-12.
Enriched MATHEMATICS curriculum for grades 7-12.
SCIENCE, SOCIAL STUDIES simulations.
Computer literacy demonstrations - all levels 3-12.
Guidance Information System, (GIS).
Career development.

Computer(s): DEC PDP 11/40; Graphics Art Dept. Computer, access to Timeshare network

Terminals: 7 interactive; 5 remote-timesharing

Public Information: OUTPUT (newsletter)

Contact(s):
Marilyn Spencer, Computer Education Supervisor
Paul Zitelli, Math Department Chairman
Robert Honsinger, Principal
Ridgewood High School
627 E. Ridgewood Avenue
Ridgewood, NJ 07451
(201) 444-9600

Teaneck High School

Reasons for Nomination: Goal that computer be accessible to large population for diverse applications; computer resource center open to all students; two full-time computer teachers; student volunteers; cooperation between discipline supervisors and computer department.

Enrollment: 1,700 **Annual Users:** 700

Other Users: Junior high CAI program (12 terminals); adult education program; alternative school students.

Illustrative Applications:
Computer-oriented units in SOCIAL STUDIES.
Computer literacy electives.
Remedial CAI program in ENGLISH, MATHEMATICS, and LANGUAGE ARTS.
Programming in BASIC, FORTRAN, COBOL, and assembly languages, as well as computer electronics in COMPUTER SCIENCE.
Guidance Information System (GIS).

Computer(s): DEC PDP 11/10; HP 2000F; Wayne County's HP 3000

Terminals: 15 interactive

Contact(s):
Richard Sheflin, Teacher
Computer Resource Center
Teaneck High School
100 Elizabeth Avenue
Teaneck, NJ 07666
(201) 837-1188 or 837-2232

Wayne Township Public School District

Reasons for Nomination: Leader of about 45 small public school districts in New Jersey that pooled manpower and resources to acquire and share computing facilities; low-budget operation with minimal professional staff.

Enrollment: 11,000; 1-12 **Annual Users:** 1,000; grades 1-12

Other Users: Approximately 8,000 of the 160,000 students in the 45 school districts.

Illustrative Applications:
Student problem-solving; primarily high school MATHEMATICS.
HP drill and practice MATH, all grades.
Guidance Information System (GIS).

Computer(s): Wayne Board of Education's four HP 2000Es; HP 3000

Terminals: 150 interactive in the entire cooperative

Contact(s):
Henry Petersen, Math Supervisor
Wayne Township Public School District
50 Nellis Drive
Wayne, NJ 07470
(201) 694-8600, Ext. 285

West Essex High School

Reasons for Nomination: Ten years' experience; annual increases in the number of courses in which computer is integrated; student-written instructional programs; students manage guidance system.

Enrollment: 1,300; 10-12 **Annual Users:** 600

Other Users: Neighboring junior high school.

Illustrative Applications: Programs developed for use in BIOLOGY, PHYSICS, CHEMISTRY and ECONOMICS.
Course teaching BASIC programming.
Entire junior class uses Guidance Information System (GIS).

Computer(s): DEC PDP 11/40

Terminals: 6 interactive

Contact(s): Walter Weig, Mathematics Teacher
West Essex High School
P.O. Box 885
West Caldwell, NJ 07006
(201) 228-1200

Albuquerque Public Schools

Reasons for Nomination: Computer center part of career enrichment center; focus on skills that help students when they graduate; range of applications; funded through local bond issue.

Enrollment: 82,000; K-12 **Annual Users:** 20,000

Other Users: Two neighboring school districts using GIS.

Illustrative Applications: Programming in BASIC, FORTRAN, COBOL, ALGOL, MACRO in COMPUTER SCIENCE and DATA PROCESSING.
Enrichment in CALCULUS.
Individualized drills in 11 skills for elementary school students (ICSP).
Computing literacy program in middle schools.
Guidance Information System (GIS).
Statistical package for SOCIAL SCIENCE (SPSS).

Computer(s): DEC PDP 10

Terminals: 36 interactive

Public Information: Newsletter

Contact(s): Rudy Miller, Director Instruc. Comp. Career Enrichment Center
Albuquerque Public Schools
807 Mountain Rd. NE
Albuquerque, NM 87102
(505) 243-3563

Amherst Central Senior High School

Reasons for Nomination: Students write tailor-made CAI programs for teachers, community projects; computer club; student interest in integrating computer in curriculum.

Enrollment: 1,400; 10-12 **Annual Users:** 300

Illustrative Applications: Introductory BASIC and APL.
Project-oriented advanced APL drills in FRENCH, LATIN, SPANISH, CHEMISTRY, and PHYSICS.
Computerized Vocational Guidance System (CVIS).

Computer(s): Erie No. 1 BOCES's IBM 370/148

Terminals: 2 interactive

Public Information: Terminal Talk (Erie No. 1 BOCES newsletter)

Contact(s): Donald Burg, Coordinator of Instruc. Computer Services
David Rosen, Computer Science Teacher
Amherst Central Senior High School
4301 Main Street
Snyder, NY 14226
(716) 836-3000, Ext. 206

Amsterdam High School

Reasons for Nomination: Ten years' experience; data processing program with 3-year sequence; class projects are used as learning materials in other discipline areas; many additional uses of the computer throughout the school (e.g., lighting, diagnosis of car problems).

Enrollment: 1,200 **Annual Users:** 100

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Illustrative Applications: DATA PROCESSING course for community college credit.
Programming in BASIC.
Nutrition applications.
Color stress test programs in PSYCHOLOGY.

Computer(s): UNIVAC 1110; IBM 1130

Terminals: 5 interactive

Contact(s): Richard Wilson
Data Processing Instructor
Amsterdam High School
Miami Avenue
Amsterdam, NY 12010
(518) 843-3180

Brentwood Union Free School District

Reasons for Nomination: Improved student achievement levels; curriculum adjusted for individuals.

Enrollment: 21,000; K-12 **Annual Users:** 13,000

Other Users: One additional school district.

Illustrative Applications: Continuous achievement monitoring.
CMI for student assessment in MATHEMATICS and READING.
COMPUTER SCIENCE courses in BASIC and FORTRAN for high school students.

Computer(s): BOCES network; NCR Century 201

Terminals: 2 interactive

Public Information: Reading and Math brochures

Contact(s): Joseph Rotolo, Coordinator of Data Processing
Business Office, Brentwood Schools
Brentwood, NY 11717
(516) 435-2309

Commack High School South

Reasons for Nomination: Student involvement; student-written CAI and simulations used in mathematics and science; test scoring applications.

Enrollment: 1,850; 10-12 **Annual Users:** 1,500

Illustrative Applications: COMPUTER SCIENCE curriculum including programming in seven languages and independent study.
Test scoring and surveys in SCIENCE, SOCIAL STUDIES, and ENGLISH.
Guidance Information System (GIS).
Simulations in SCIENCE and SOCIAL STUDIES.

Computer(s): LIRICS Network's DEC PDP 10

Terminals: 2 interactive

Public Information: LIRICS brochure. Annual Book of Student Programs, Commack South Math/Computer Newsletter.

Contact(s): William Stenzler, Assoc. Director of Research, Computer Science Math Instructor
Commack High School South
Vanderbilt Parkway
Commack, NY 11725
(516) 499-5800, Ext. 254

Community School District No. 18

Reasons for Nomination: Computer management system with curricula designed by teachers; ongoing feedback for curriculum revision; student achievement gains.

Enrollment: 19,000 **Annual Users:** 19,000

Illustrative Applications: Management by objectives and test scoring for grades 1-9.
MATHEMATICS curriculum.
READING project for K-2.
Curricula for BILINGUAL, CAREER, CONSUMER, and METRIC education.

Computer(s): DEC PDP 11/70; DEC PDP 11/04

Terminals: 2 interactive

Public Information: Information available

Contact(s): Wayne Trigg
ISS Project Director
Community School District No. 18
755 E. 100th Street
Brooklyn, NY 11236
(212) 257-7518

Dodge Road Elementary School

Reasons for Nomination: Locally developed CAI curriculum; Title I program that has exceeded objectives for student achievement.

Enrollment: 780; K-5 **Annual Users:** 100

Illustrative Applications: CAI remedial READING and MATHEMATICS for grades 1-5.
Computer management of system to monitor student progress and retrieve information on instructional materials.

Computer(s): ERIE I BOCES' IBM 370

Terminals: 1 interactive

Public Information: Terminal Talk (ERIE I BOCES newsletter)

Contact(s): Joseph Chimera, Assist. to Superintendent
Donald Ogilvie, Adminis. Assistant
Williamsville School District
5225 Sheridan Drive
Williamsville, NY 14221
(716) 634-5300

Freeport Public Schools

Reasons for Nomination: Student body 50% minority; district-wide achievement on standardized tests increasing due to technology; all students get computer services; concentration on elementary students, emphasis on teacher training.

Enrollment: 7,700; K-12 **Annual Users:** 7,000

Illustrative Applications: Drill and practice in READING, MATHEMATICS, and LANGUAGE ARTS.
CMI system in READING and MATHEMATICS including prescription of available resources and on-line testing.
SAT preparation package, regents exam preparation in MATHEMATICS, SCIENCE, SOCIAL STUDIES, and ENGLISH
CAI programs in MATH 9 and MATH 11.
Problem-solving and simulation using COBOL, FORTRAN, APL, BASIC

Computer(s): DEC PDP 11/45; 2 CCC A17

Terminals: 200 interactive

Public Information: "A Study of the Successes of Computer-Assisted Instruction," *Inside Education,* N.Y. State Education Dept. Oct. 1976

Contact(s): Joe I. Holbrook, Director of Math.
Freeport Public Schools
P.O. Box 50
Freeport, NY 11520
(516) 623-2100

Greenwich Central School

Reasons for Nomination: Small school with in-house capability; heavy utilization of programmable calculator.

Enrollment: 700 **Annual Users:** 300

Illustrative Applications: Computer MATHEMATICS.
BUSINESS data processing.

Computer(s): Monroe Programmable Calculator

Contact(s): Richard McGuire, Coordinator
Greenwich Central School
Greenwich, NY 12834
(518) 692-2251

Guilderland Public Schools

Reasons for Nomination: Criterion referenced testing provides data base for curriculum analysis and improvement; improvement in national test scores.

Enrollment: 5,350; K-12 **Annual Users:** 3,400

Illustrative Applications: Problem-solving and drill and practice in MATHEMATICS.
Criterion reference testing in MATHEMATICS and READING.
Guidance system.

Computer(s): BOCES network's IBM 370/135

Terminals: 1 interactive

Contact(s): Harold McCarthy, School Bus. Admin.
Guilderland Central School Dist. No. 2
State Farm Road
Guilderland, NY 12084
(518) 456-6200

H. Frank Carey High School

Reasons for Nomination: Eight-year history; offset nationwide decline in physics and chemistry programs with little effort implementable in standard physics and chemistry courses; developed computer-based curricular materials.

Enrollment: 2,200; 7-12 **Annual Users:** 70

Illustrative Applications: CAI-tutorials.
Introductory CHEMISTRY and PHYSICS grades 10-12 (plus 1st. year college).

Computer(s): Honeywell 1640; Access to BOCES DEC PDP 10

Terminals: 7 interactive

Public Information: Physics Teacher Magazine - Oct. 76; May 77

Contact(s): Alien I. Rosen, Physics & Chemistry Teacher
H. Frank Carey High School
Franklin Square
Long Island, NY 11010
(516) 328-4805

Jamesville-DeWitt Central School District

Reasons for Nomination: Provides CMI services to 100 school districts; the Evaluation Center has paid its own way for 5 years; all services provided with minicomputer with 4K memory.

Enrollment: 4,000 **Annual Users:** CMI 4,000
CAI 250

Other Users: 100 school districts use some of the CMI services.

Illustrative Applications: Computer-managed instruction for all students including testing, prescription, program planning.
Guidance Information System (GIS).
Remedial MATHEMATICS drills for high school students.

Computer(s): BOCES Network; DEC PDP 8

Terminals: 3 interactive

Public Information: Literature available on CMT applications

Contact(s): Ronald Osborn
Curriculum Coordinator
Jamesville-DeWitt Central School District
Edinger Drive
DeWitt, NY 13214
(315) 446-0550

Jericho High School

Reasons for Nomination: Faculty training and involvement; facilities similar to a library and available to all students; faculty take terminals home for lesson preparation; academic computing since 1969.

Enrollment: 1,000; 10-12 **Annual Users:** 500

Other Users: 350-400 junior high school students.

Illustrative Applications: Simulations and data reduction in SCIENCE for grades 11-12.
Simulations in SOCIAL SCIENCE for grades 10-12.
Programming and problem-solving in MATHEMATICS for grade 11.
GUIDANCE in all grades.

Computer(s): Nassau Computer-Oriented Directions in Education (NCODE)'s DECsystem-10

Terminals: 3 interactive (plus 2 in junior high)

Public Information: Brochure of network services offered
Order from: Robert Liquori, Mgr.
BOCES/NCODE
1196 Prospect Ave.
Westbury, NY 11590
(516) 334-1770

Contact(s): David S. Martin, Computer Coordinator
Jericho High School
Rt. 107
Jericho, NY 11753
(516) 681-4100, Ext. 27

Mahopac Senior High School

Reasons for Nomination: Low budget; integration of computer in mathematics curriculum; student benefits.

Enrollment: 1,900; 9-12 **Annual Users:** 200

Illustrative Applications:
Programming in MATHEMATICS, grades 9-11.
Drills and problem-solving in MATHEMATICS.

Computer(s): IBM System 3; BOCES Network

Terminals: 1 interactive

Contact(s):
Edward Rice, Assist. Superintendent of Schools
Joseph Girven, Principal
Mahopac Senior High School
Baldwin Place Road
Mahopac, NY 10541
(914) 628-3415, Ext. 206

Middle Country School District No. 11

Reasons for Nomination: Long standing CMI program (7 years); direct classroom use of computer with immediate feedback to both students and instructors.

Enrollment: 16,000; K-12 **Annual Users:** 100; 9-12 (CMI project involves all)

Other Users: 12-elementary; 4-secondary

Illustrative Applications:
CMI program - CATER (Comprehensive Accountability Testing, Evaluation, and Recordkeeping) criteria referenced testing and general scoring of tests.
Programming in BASIC, independent study in FORTRAN, ALGOL, Assembler, and FOCAL.
Simulation in MATHEMATICS, SCIENCE, SOCIAL SCIENCES, and HEALTH.
Drill and practice in MATHEMATICS.

Computer(s): DEC PDP 8

Terminals: 14 interactive

Contact(s):
Richard A. Haskell, Coordinator CATER Project
Dawnwood Junior High School
No. 10, 43rd Street
Centereach, NY 11720
(516) 737-4074

North Syracuse Central School System

Reasons for Nomination: Diversity of programs; in-service training for district teachers; computer awareness demonstration for area administrators.

Enrollment: 13,000 **Annual Users:** 3,000

Illustrative Applications:
Simulations and laboratory applications in SCIENCE.
Computer programming courses.
Drill and practice in MATHEMATICS (ICSP).
Guidance Information System (GIS).

Computer(s): BOCES Network's HP 2000 ACCESS

Terminals: 8 interactive

Contact(s):
Frederick L. Barker, Director of Educational Computing
Cicero High School
Route 31
Cicero, NY 13039
(315) 699-2611, Ext. 66

Riverdale Country School

Reasons for Nomination: Expanding program; student-developed curricular materials; computer club.

Enrollment: 900 **Annual Users:** 400

Illustrative Applications:
Programming in BASIC for grades 5-12.
Spelling vocabulary programs.
Developing ENGLISH curriculum.
SCIENCE classes analyze results of experiments.
MATHEMATICS strands for grades 1-6.

Computer(s): DEC PDP 11/34

Terminals: 13 interactive

Contact(s):
Bruce Alcock, Director of Computer Activities
Riverdale Country School
W. 253rd and Fieldston Road
Bronx, NY 10471
(212) 549-8044

Spence School

Reasons for Nomination: Extensive computing in a small school; all students grades 1-12 use the computer resources; large number of terminals permits extensive student access; in-house development of curriculum materials.

Enrollment: 516; K-12 **Annual Users:** 500

Other Users: 7 private schools

Illustrative Applications: COMPUTER SCIENCE curriculum, including introductory programming for all 7th graders, advanced BASIC and student projects for high school students.
Drill and practice in MATHEMATICS, grades 1-12.
Simulations and problem-solving applications in many discipline areas.

Computer(s): DEC PDP 11/70

Terminals: 32 interactive

Contact(s): Sylvia D. Holley, Chairman
Science Department
Spence School
22 E. 91st. Street
New York, NY 10028
(212) 289-6450

Sweet Home High School

Reasons for Nomination: Career center run by students using computers; students developing environmental science programs; student awareness of careers through computer club.

Enrollment: 2,600; 9-12 **Annual Users:** 1,800

Illustrative Applications: Guidance Information System (GIS).
Programming in APL, BASIC, FORTRAN in SCIENCE.
COMPUTER SCIENCE curriculum.

Computer(s): ERIE I BOCES Network

Terminals: 2 interactive

Public Information: Terminal Talk (newsletter)

Contact(s): John Daken, Career Specialist
David Miller, Science Teacher
1901 Sweet Home Road
Buffalo, NY 14221
(716) 688-8686

Syosset High School

Reasons for Nomination: Long-standing program; availability of computer.

Enrollment: 2,300; 10-12 **Annual Users:** 750

Illustrative Applications: Programming in BASIC with emphasis on hands-on experience.
Guidance Information System (GIS).
Data analysis in SCIENCE curriculum.

Computer(s): Nassau BOCES DECsystem-10

Terminals: 3 interactive

Contact(s): Bernard Goudreau, Math Teacher
Syosset High School
Syosset, NY 11791
(516) 921-5700

C.E. Jordan High School

Reasons for Nomination: Student and teacher interest in science areas; student accessibility to terminals in evenings; expanding use to other discipline areas.

Enrollment: 925; 10-12 **Annual Users:** 200

Other Users: Neighboring junior high school.

Illustrative Applications: Simulations and analysis of lab data in PHYSICS and CHEMISTRY.
Problem-solving in ALGEBRA, GEOMETRY, and CALCULUS.
COMPUTER SCIENCE courses with students programming in BASIC and FORTRAN.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 5 interactive

Public Information: School Computer Education News

Contact(s): David Green, Math & Science Teacher
C.E. Jordan High School
6806 Garrett Road
Durham, NC 27707
(919) 489-0518

Fike High School

Reasons for Nomination: Developed model computer literacy curriculum; teacher training; computer club; independent student projects.

Enrollment: 1,000; 11-12 **Annual Users:** 150

Illustrative Applications: Programming and problem-solving in ALGEBRA and TRIGONOMETRY.
Engineering Curriculum Concepts Project (ECCP) emphasizing computer modeling.
Computer literacy for CAREER MATHEMATICS students.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 2 interactive

Public Information: School Computer Education News

Contact(s): Jeannette Norfolk, Math Teacher
Fike High School
500 Harrison Drive
Wilson, NC 27893
(919) 291-6580

J.Y. Joyner Elementary School

Reasons for Nomination: Variety of applications for elementary students; parental involvement; student interest; local development of programs.

Enrollment: 368; K-5 **Annual Users:** 300

Illustrative Applications: Drills in MATHEMATICS, LANGUAGE ARTS, and SOCIAL STUDIES.
Students program pictures, games.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 1 interactive

Public Information: Newsletter published by
School Computer Education Center
326 Poe Hall
N.C. State University
Raleigh, NC 27607

Contact(s): Dorothy McPhaul, Media Coordinator
J.Y. Joyner Elementary School
2300 Noble Road
Raleigh, NC 27608
(919) 755-6189

Millbrook Senior High School

Reasons for Nomination: Computer availability for students to teach themselves programming; broadening influence for bright students.

Enrollment: 1,800; 10-12 **Annual Users:** 200

Illustrative Applications: Problem-solving and programming in ALGEBRA II.
Simulations and problem-solving in SCIENCE and ADVANCED MATHEMATICS.
Remedial drills for ALGEBRA I.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 2 interactive

Public Information: School Computer Education News

Contact(s): Pat Moore, Chairperson Math Dept.
Millbrook Senior High School
2201 Spring Forest Road
Raleigh, NC 27609
(919) 876-1473

Southern Wayne High School

Reasons for Nomination: Increase in student motivation, logical skills.

Enrollment: 1,200; 10-12 **Annual Users:** 200

Illustrative Applications: Problem-solving and programming in ALGEBRA II.
Computer programming in BASIC.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 1 interactive

Public Information: School Computer Education News

Contact(s): Joyce Cunningham, Wayne County Computer Coordinator
Southern Wayne High School
Dudley, NC 28333
(919) 734-7196

West Cary Junior High School

Reasons for Nomination: Computer club learning programming after school; local development of algebra materials, using computer with learning disability students.

Enrollment: 1,035; 7-9 **Annual Users:** 200

Illustrative Applications:
Computer programs integrated into the ALGEBRA I curriculum.
Enrichment programs for grades 7-8 in MATHEMATICS.
Simulations in HISTORY.

Computer(s): School Computer Service Corporation's GE 265

Terminals: 1 interactive

Contact(s):
Don Beal, Chairman Math Dept.
West Cary Junior High School
Evans Road
Cary, NC 27511
(919) 467-6164

Belmont High School

Reasons for Nomination: Locally-funded program with six-year history; studies on using CAI for special education students to do programming projects for community agencies.

Enrollment: 1,850 **Annual Users:** 875

Illustrative Applications:
Drills in READING and MATHEMATICS.
Simulations and CAI in CHEMISTRY, SOCIAL STUDIES, BIOLOGY and BUSINESS courses.
SOCIAL STUDIES course in which students perform tasks in the community.
COMPUTER SCIENCE courses.
Guidance Information System (GIS).

Computer(s): HP 2000C; HP 2000F

Terminals: 4 interactive

Contact(s):
Tom Vincent, Mathematics and Computer Science Teacher
Belmont High School
2323 Mapleview Avenue
Dayton, OH 45420
(513) 253-8881

Berea High School

Reasons for Nomination: CAI used extensively; implementation and expansion of computer curriculum; software locally written; outreach via national user group.

Enrollment: 1,900; 10-12 **Annual Users:** 300

Other Users: 2 high schools, 3 junior highs.

Illustrative Applications:
Programming classes and problem-solving (BASIC).
Simulations in BIOLOGY, EARTH SCIENCE, and SOCIAL SCIENCES.
Drill and practice in MATHEMATICS and ENGLISH.
Computer literacy courses.

Computer(s): DEC PDP 11/40

Terminals: 12 interactive

Contact(s):
Charles Mustain, Unit Coordinator
Berea High School
165 East Bagley Road
Berea, OH 44017
(216) 234-5418

Cincinnati Country Day School

Reasons for Nomination: Broad-based program in its 10th year; microprocessor interfaces to time-share system for real-time laboratory measurements; workshops given by staff.

Enrollment: 750; pre-K-12 **Annual Users:** 250; 5-12

Other Users: Two public high schools.

Illustrative Applications:
Problem-solving activities in 80% of the MATHEMATICS courses, grades 7-12.
COMPUTER SCIENCE course teaching BASIC programming.
Data-handling, data reduction programs for SCIENCE.
FRENCH programs.

Computer(s): HP 2000F; IMSAI 8080

Terminals: 12 interactive

Public Information: Brochure available

Contact(s):
David E. Laird
Director of Computer Development
Cincinnati Country Day School
6905 Given Road
Cincinnati, OH 45243
(513) 561-7298

Cincinnati Public School District

Reasons for Nomination: Cost-effective instructional computing; CMI in mathematics and reading; community outreach.

Enrollment: 60,000

Other Users: Adult education program.

Illustrative Applications:
Citywide CMI in MATHEMATICS and READING, grades 1-8.
Remedial drills in MATHEMATICS, and READING, grades 7-12.
Adult education program in GED, LANGUAGE SKILLS, MATHEMATICS, and READING.

Computer(s): Two HP 2000 Access; HP 2000C; HP 3000

Terminals: 250 interactive

Public Information: *Response Time* (newsletter)

Contact(s):
John H. Grate, Coordinator
Planning & Development Branch
Cincinnati Public Schools
230 E. 9th Street
Cincinnati, OH 45202
(513) 369-4870

Norwood Senior High School

Reasons for Nomination: Computer in both vocational and academic programs; students allowed hands-on experience with equipment.

Enrollment: 1,400; 10-12 **Annual Users:** 170

Illustrative Applications:
Programming in RPG and FORTRAN.
Computer literacy course.
Test grading.
Problem-solving.

Computer(s): IBM 1130

Contact(s):
Robert Lowther, Teacher
Data Processing
Norwood Senior High School
2020 Sherman Avenue
Norwood, OH 45212
(513) 731-7600

Ohio's Handicapped-Education-Learners' Planning System

Reasons for Nomination: State-wide system whose user population has increased greatly in the last few years; users overcame fears of using computers; interactive information system.

Annual Users: 1,175 teachers, counselors, etc.

Illustrative Applications:
Computerized information storage and retrieval system of information about instructional resources for planning individualized instruction for the handicapped (unlimited age range).
Information on materials, activities, performance measures, and supportive information for pupils, teachers, and supervisors.

Computer(s): CDC 6400

Terminals: 17 interactive

Public Information: Brochure available; The HUG Letter (monthly newsletter)

Contact(s):
James F. Daiker
Helps Project Director
Miami Valley Regional Center
1150 Beatrice Drive
Dayton, OH 45404
(513) 236-9965

Robert Garmise
Program Director
Information and Data Systems Center for Improved Education
Battelle Institute
505 King Avenue
Columbus, OH 43201
(614) 427-7182

Woodridge Public Schools

Reasons for Nomination: Designed instructional models to be used by classroom teachers; performed 3-year study of CAI in the classroom; increases in student achievement; computer literacy program.

Enrollment: 1,600 **Annual Users:** 280

Illustrative Applications:
CAI remedial READING and MATHEMATICS for elementary and junior high school students.
COMPUTER MATHEMATICS for high school students.

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Computer(s): University of Akron's IBM 370/158

Terminals: 4 interactive

Contact(s): Kathy Hirschbuhl
Jan Bishop
Reading/CAI Coordinators
Woodridge Junior High School
1930 Bronson Road
Peninsula, OH 44264
(216) 657-2351

Adair High School

Reasons for Nomination: Pioneer in computer science offering in Oklahoma; small school which has thorough computer science curriculum.

Enrollment: Over 200; 9-12 **Annual Users:** 10-20 bi-annually

Illustrative Applications: Extensive curriculum in COMPUTER SCIENCE using FORTRAN and BASIC.
Separate COMPUTER SCIENCE programs offered to BUSINESS-oriented students and MATHEMATICS/SCIENCE students.

Computer(s): Northeaster OK A&M Junior College's IBM 360; access to GE in Cleveland, OH

Terminals: 1 interactive

Public Information: General outline of computer science course and sources used

Contact(s): Michael Bolton, Principal
Adair High School
P.O. Box 197
Adair, OK 74330
(918) 785-2424

Northwest Classen High School

Reasons for Nomination: Student interest; program growing; support from administration.

Enrollment: 2,000; 9-12 **Annual Users:** 90

Illustrative Applications: COMPUTER MATHEMATICS courses.
Student programming in BASIC and PL/1.

Computer(s): School district's IBM 370/135

Terminals: 3 interactive

Contact(s): R. St. Dizier, Chairman
Department of Mathematics
June Dawkins, Principal
Northwest Classen High School
2801 N. May
Oklahoma City, OK 73107
(405) 942-5551

Ashland Senior High School

Reasons for Nomination: Nine year history of computer as utility available to all students; students writing programs in BASIC, FORTRAN, COBOL.

Enrollment: 700; 10-12 **Annual Users:** 135; All use Career Info. Service at least once.

Illustrative Applications: Career Information Service.
Computer used as tool in MATHEMATICS and SCIENCE.
Huntington II simulations in SOCIAL STUDIES.
Three courses in COMPUTER SCIENCE (literacy, programming).

Computer(s): ECP-18; access to Jackson County Consortium's HP 2000F

Terminals: 5 interactive

Contact(s): Keith Garrett, Chairman Math Dept.
Ashland Senior High School
201 Mountain Avenue
Ashland, OR 97520
(503) 482-4055

Catlin Gabel School

Reasons for Nomination: Expanding program with applications for grades 1-12; faculty in-service; students building microprocessor with voice output.

Enrollment: 650; K-12 **Annual Users:** 450

Illustrative Applications: SCIENCE lab calculations.
COMPUTER SCIENCE and computer literacy programs.
ANALYTIC GEOMETRY applications.
Pre-READING skills package, grades 1-2.

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Computer(s): OMSI's DEC PDP 11/45; IMSAI 8080

Terminals: 3 graphics

Contact(s): Ronald Tenison, Physics Teacher
Sam Greeley, Elementary Principal
Catlin Gabel School
8825 SW Barnes
Portland, OR 97225
(503) 297-1894

Milwaukee High School

Reasons for Nomination: Use of microcomputers; spectrum of applications; 2 years of computer science offered, locally led and sponsored; remedial work for mentally retarded.

Enrollment: 1,400; 9-12 **Annual Users:** 750

Illustrative Applications: Computer science, programming in assembler, machine language, BASIC, hardware studied in microcomputers.
Drill and practice in MATHEMATICS.
Problem-solving.
Simulation in BUSINESS, BIOLOGY, CHEMISTRY, PHYSICS, SOCIAL STUDIES.

Computer(s): HP 2000 Access; Altair 8800; HP 2000C; DEC PDP 8

Terminals: 4 interactive

Contact(s): Gerald F. Larer, Coordinator
Data Services
Milwaukee High School
1550 23rd Street S.E.
Milwaukee, OR 47222
(503) 653-3862

North Salem High School

Reasons for Nomination: Long-standing program; goal to teach computer literacy and public awareness about the uses of computers; student interest high.

Enrollment: 1,500 **Annual Users:** 700

Illustrative Applications: Computer programming in FORTRAN, BASIC (3 dialects), FOCAL, and Assembler.
Computer Literacy classes.
Career Information System available to all students.
Computer terminals in subject area classrooms.

Computer(s): DEC PDP 8I; DEC CLASSIC; IMSAI; Access to Willamette University

Terminals: 4 interactive

Contact(s): Robert S. Jaquiss, Sr.
Computer Teacher
North Salem High School
765 14th Street, NE
Salem, OR 97301
(503) 399-3241

Oregon Museum of Science and Industry

Reasons for Nomination: Science center providing public access to computers; development and dissemination of sophisticated software systems and computer languages including PASCAL; students gaining practical skills for future employment.

Annual Users: 5,000, all ages.

Other Users: Local public and private schools, colleges, universities, and businesses.

Illustrative Applications: Use of computer in exhibit areas including a computer-controlled "turtle" for demonstrations, questions and answers in an energy center, and games.
Student independent programming projects for high school credit; field trips to introduce students to computing.
Teacher in-service.
Seminars on topics in computing.

Computer(s): DEC PDP 11/45

Terminals: 12 interactive

Contact(s): Rusty Whitney, Director of Computing
Oregon Museum of Sci. and Industry
4015 Canyon Road
Portland, OR 97221
(503) 248-5900

Reynolds High School

Reasons for Nomination: Active student participation; students built microprocessor and developed software for it; students write programs for other student's use.

Enrollment: 1,400 **Annual Users:** 800

Illustrative Applications:
- COMPUTER SCIENCE curriculum: includes computer literacy, BASIC programming, advanced programming techniques, and microprocessors.
- Career Information System, questionnaire and retrieval system.
- Simulations in SCIENCE and SOCIAL STUDIES.
- Skill-oriented CAI for remedial MATHEMATICS students.

Computer(s): County's HP 2000C and HP 2000 Access; IMSAI 8080

Terminals: 2 on-line, 5 off-line

Contact(s):
Earl Philips, Computer Math Instructor
Bill Petersen, Mathematics Instructor
Reynolds High School
1200 NE 201st.
Troutdale, OR 97060
(503) 666-7825

Winston Churchill High School

Reasons for Nomination: Broad computing literacy program; extensive computer use as augmentation to learning.

Enrollment: 1,200; 10-12 **Annual Users:** 400

Illustrative Applications:
- Huntington II simulations in SCIENCE, SOCIAL SCIENCE, BUSINESS.
- Career Information Service for all students.
- Computer literacy, programming in BASIC.

Computer(s): Oregon Total Information Service (OTIS)'s two HP 2000F

Terminals: 4 interactive

Contact(s):
John Shirey, Instructor
Mathematics Department
Winston Churchill High School
1850 Bailey Hill Road
Eugene, OR 97405
(503) 687-3439, or 3499

Churchill Area School District

Reasons for Nomination: Program operational 12 years; programming in grades 3-adult through classes, clubs, mini-courses and adult education; locally funded; data center in which students constitute the programming staff.

Enrollment: 4,500; K-12 **Annual Users:** 1,600 (includes 200 student programmers)

Illustrative Applications: Three course high school curriculum.
- Advanced COMPUTER SCIENCE students wrote COBOL (subset) compiler.
- Special survey analysis program written and operated as a 10th grader's health project.
- Multiple-choice tests scored and analyzed annually by 100+ teachers.

Computer(s): General Automation 18/30

Contact(s):
L. Robert McAfoos
Director of Data Services
Churchill Area School District
4240 Greensburg Pike
Pittsburgh, PA 15221
(412) 244-1100, Ext. 76

School District of Philadelphia

Reasons for Nomination: Spectrum of applications; large city system with fifteen years' history of operational experience; extensive local curriculum development.

Enrollment: 270,000; K-12 **Annual Users:** 70,000

Other Users: 15 neighboring school districts, private, and parochial schools.

Illustrative Applications:
- CAI (grades 7-10) and CMI (grades 1-12) systems for READING and MATHEMATICS.
- Vocational Guidance System (VICS).
- Computer literacy for all junior high schools.
- Computer management of many discipline areas including ELECTRONICS, BIOLOGY, ALGEBRA.

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Computer(s): 7 HP 2000Fs; HP 3000

Terminals: 400 interactive

Contact(s): Sylvia Charp, Director of Instructional Systems
School District of Philadelphia
5th and Luzerne Sts.
Philadelphia, PA 19140
(215) 229-9492

Upper St. Clair High School

Reasons for Nomination: Ten years' experience; system totally devoted to student use; students learn computer science through interaction with other students, computer materials, and teachers.

Enrollment: 2,100; 9-12 **Annual Users:** 600

Illustrative Applications: Independent study, student-led activities in programming.
CAI in ALGEBRA, TRIGONOMETRY, PRECALCULUS and CALCULUS.
Research to determine effects of long-term independent study computer use in second year ALGEBRA and student characteristics which cause positive attitudes toward computer use and MATHEMATICS.

Computer(s): DEC PDP 8E

Terminals: 8 (1 graphics)

Public Information: "Computer News" (Monthly Newsletter)

Contact(s): James Saunders, Director
Upper St. Clair Computer Center
1825 McLaughlin Run Road
Upper St. Clair, PA 15241
(412) 833-1600

Memphis City Schools

Reasons for Nomination: Media coordination by computers enables better distribution of instructional materials; more efficient administration allowing greater concentration on education.

Enrollment: 118,000; K-12 **Annual Users:** 4,000

Illustrative Applications: Drill and practice and testing in MATHEMATICS.
Evaluation and testing in READING (diagnostic, goal testing, and prescriptive testing).

Computer(s): HP 2000C; HP 2000F; IBM 370/135

Terminals: 64 interactive

Contact(s): John Merrill, Director
Data Processing Division
Board of Education
Memphis City Schools
2597 Avery Avenue
Memphis, TN 38112
(901) 454-5425

Aldine School District

Reasons for Nomination: Long history of academic computing; program has expanded; all secondary students exposed to computers.

Enrollment: 34,000 K-12 **Annual Users:** 12,000

Illustrative Applications: COMPUTER SCIENCE courses.
Problem-solving in MATHEMATICS and SCIENCE.
Vocational DATA PROCESSING.
Computing literacy for all junior high schools.

Computer(s): Region IV Education Service Center's CDC

Terminals: 9 interactive

Contact(s): R.D. Thomas, Secondary Mathematics and Science Consultant
Jerry Keeble, Director of Vocational Education and Special Programs
Aldine School District
14910 Aldine-Westfield Road
Houston, TX 77032
(713) 449-1094

Austin Independent School District

Reasons for Nomination: Quality of programs available through University of Texas, resource for advanced students.

Enrollment: 58,500; K-12 **Annual Users:** 500

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Illustrative Applications: COMPUTER MATHEMATICS courses teaching BASIC and FORTRAN programming.
Simulations in CHEMISTRY, PHYSICS, BIOLOGY.

Computer(s): University of Texas' CDC 6600 and CDC 6400; IBM 370/155

Terminals: 9 interactive

Contact(s): Terry Bishop, Director
Planning and Programming
Austin Independent School District
6100 Guadalupe Street
Austin, TX 78752
(512) 451-8411

Bryan Independent School District

Reasons for Nomination: Student achievement gains; community education program.

Enrollment: 10,000; K-12 **Annual Users:** 200

Illustrative Applications: Vocational DATA PROCESSING curriculum for 11-12th grade students.
Drill and practice for students grades 5-7 in MATHEMATICS, READING, and LANGUAGE ARTS.

Computer(s): Education Service Center Region X's CDC Cyber 172; CCC A16

Terminals: 61 interactive

Contact(s): Frank Lown, Coordinator
Data Processing Services
Nancy Beard, Instructor
Vocational Data Processing
Bryan Independent School District
3401 E. 29th Street
Bryan, TX 77801
(713) 822-7837

Dallas Independent School District

Reasons for Nomination: Program expanded over 10 years; local funding; faculty in-service; increased attendance and lessened discipline problems attributed to CAI.

Enrollment: 142,000 **Annual Users:** 6,000

Illustrative Applications: Drill and practice for deaf and accelerated students grades 3-6 in MATHEMATICS, READING, and LANGUAGE ARTS.
Bilingual program using Votrax synthesizer.
Problem-solving in MATHEMATICS, PHYSICS, CHEMISTRY.
On-line MATHEMATICS testing system in junior high.

Computer(s): Burroughs 6700; HP 2000 Access; CCC A16; DEC PDP 11/45

Terminals: 127 interactive

Public Information: Time Sharing Catalog

Contact(s): Duane Dean, Tele Com. Supervisor
Dallas Independent School District
3700 Ross
Dallas, TX 75204
(214) 824-1620

Irving Independent School District

Reasons for Nomination: Expanding program; locally developed management system; concentration in junior high computer literacy; computer awareness in 5th grade for gifted children.

Enrollment: 25,000; K-12 **Annual Users:** 15,000

Illustrative Applications: Drill and practice MATHEMATICS for students grades 6-8.
Computer awareness and introductory programming for students grades 6-8.
COMPUTER MATHEMATICS teaching BASIC and FORTRAN programming to high school students.
Classroom management facility for junior high students.

Computer(s): Education Service Center Region X's 2 HP 2000 Access

Terminals: 15 interactive

Contact(s): George Harris, Math Consultant
Irving Independent School District
901 O'Connor Road
Irving, TX 75061
(214) 259-4575

Killeen Independent School District

Reasons for Nomination: Expanding program; elementary demonstration project; use of guidance information system; students and teachers take home terminals.

Enrollment: 16,500 **Annual Users:** 500

Illustrative Applications: Computer MATHEMATICS with students learning BASIC and FORTRAN.
Guidance Information System (GIS).

Computer(s): Regional Service Center, Waco, TX

Terminals: 8 interactive

Public Information: Get - $NEWS published by Region 12 Service Center

Contact(s): Davina Maines, Secondary Consultant
Killeen Independent School District
P.O. Box 967
Killeen, TX 76541
(817) 699-3102

Richardson Independent School District

Reasons for Nomination: Growing program; student-developed CAI programs customized for teachers' needs, library systems; elementary and junior high computer clubs.

Enrollment: 36,500; K-12 **Annual Users:** 3,000

Illustrative Applications: Computer MATHEMATICS, grades 7-12, students learn BASIC and FORTRAN programming.
Drill and practice for elementary students in MATHEMATICS and READING.
Secondary SCIENCE applications.
Guidance Information System (GIS).

Computer(s): Education Service Center Region X's 2 HP 2000 Access

Terminals: 18 interactive

Contact(s): John W. Lomax, Administrative Assistant, Data Processing
Elizabeth Chandler, Math Consultant
Richardson Independent School District
400 S. Greenville
Richardson, TX 75080
(214) 238-8111

Waxahachie Independent School District

Reasons for Nomination: Expanding program; researching student failures and information for staff development.

Enrollment: 3,500; K-12 **Annual Users:** 50

Illustrative Applications: Individualized COMPUTER SCIENCE course teaching BASIC programming.
PHYSICS simulations of laboratory experiments.
Guidance Information System (GIS).
Classroom management facility system for junior high MATH program.

Computer(s): Education Service Center X's 2 HP 2000 Access

Terminals: 2 interactive

Contact(s): Ron Hastings, Science Dept. Chairman
Waxahachie Independent School District
Highway 77 North
Waxahachie, TX 75165
(214) 937-6800

Jordan School District

Reasons for Nomination: Cost-feasible system; integral part of program development and improvement; increased student achievement; educational productivity.

Enrollment: 40,000; K-12 **Annual Users:** 12,000 (24,000 in 1978-79)

Illustrative Applications: TRACER, a student information management system that monitors and guides students through instructional programs in MATHEMATICS, grades 3-12, READING grades 3-12, and SCIENCE grades 7-12.
Computer literacy for high school students.

Computer(s): Utah State Board of Education, Division of Data Processing's IBM 370/148; Datapoint 5500

Terminals: 6 interactive

Public Information: Brochures available

Contact(s): C. Devon Sanderson, Director of Educational Systems
Jordan School District
9361 South 400 East
Sandy, UT 84070
(801) 255-6891

Arlington County Public Schools

Reasons for Nomination: Goal that every secondary student have some experience using computers; batch capability so entire classes can be writing and running programs at the same time.

Enrollment: 20,000; K-12 **Annual Users:** 3,000; 6-12

Illustrative Applications:
The computer is used as a problem-solving tool in MATHEMATICS, SCIENCE, and BUSINESS EDUCATION.
Junior high students learning programming.
Use of the computer for individual projects (e.g., Science Fair).

Computer(s): HP 2000F; 3 HP 9830

Terminals: 12 interactive

Contact(s):
Frank Miller
Arlington County Public Schools
1426 N. Quincy Street
Arlington, VA 22207
(703) 588-2012

Fairfax County Public Schools

Reasons for Nomination: Curriculum in computer science and business data processing; integration of student programming and CAI in high school mathematics courses; students developing CAI; administrative packages and programs for student activities.

Enrollment: 135,000; K-12 **Annual Users:** 15,000

Other Users: Private school.

Illustrative Applications:
COMPUTER SCIENCE curriculum covering fundamentals of computer structure, algorithms, operating systems, and programming.
Integration of student programming and CAI (4000 students) in MATHEMATICS courses.
Guidance Information System (GIS).
Business DATA PROCESSING (concepts, office practices, programming).

Computer(s): HP 2000 Access; HP 2000F; 2 HP 3000s

Terminals: 79 interactive

Contact(s):
Marvin Koontz, Computer Operations Specialist
James Lee Media Center
2855 Annandale Road
Falls Church, VA 22042
(703) 536-2600

Mathematics and Science Center

Reasons for Nomination: Center serves four school districts and three private schools; computer literacy program; increase in achievement for elementary CAI students; large-scale in-service teacher training; developing computer awareness kits for grades 8-12.

Annual Users: 10,000

Illustrative Applications:
Classes visit the center for computer awareness sessions.
Staff visits MATH and SCIENCE classes to show teachers how computer can be used in the classroom.
Mobile van for MATH drill and practice at the elementary level.
Programming for grades 5-12, Saturdays and summers.

Computer(s): HP 2000F

Terminals: 50 interactive

Public Information: Brochure available

Contact(s):
Dan Yates, Curriculum Specialist
Mathematics and Science Center
2200 Mountain Road
Glen Allen, VA 23060
(804) 262-8643

Norfolk Public Schools

Reasons for Nomination: Computer instruction fully integrated with other school programs; programs and reports highly user-oriented; CAI material self-written; CAI program has improved scores and attendance with students.

Enrollment: 47,000; K-12 **Annual Users:** 1,200; 6-7

Illustrative Applications:
Drill and practice in MATHEMATICS and LANGUAGE ARTS for low-achieving minority students.
On-line objective testing.
Use of text editor in creative writing curriculum.

Computer(s): HP 2000 Access

Terminals: 24 interactive

Public Information: Description of CACI project available

Contact(s):
Peter McVay, CACI Project Staff
Randy Gull, CACI Project Staff
Norfolk Public Schools
800 East City Hall Ave., Rm. 1008
Norfolk, VA 23510
(804) 441-2638

Richlands High School

Reasons for Nomination: Rural district, only one in area of state using the computer; computer science; unique hardware for hard copy; computer tours for students.

Enrollment: 1,300 **Annual Users:** 130

Illustrative Applications:
COMPUTER SCIENCE course teaching BASIC.
Statistics programs used in ADV. BIOLOGY.

Computer(s): Wang 2200

Terminals: 1 interactive

Contact(s):
Thomas Witten, Assistant Principal of Instruction
Richlands High School
Route 460
Richlands, VA 24641
(703) 964-4602

Highline School District

Reasons for Nomination: Eight years' experience; spectrum of applications; academic progress of students using CAI packages.

Enrollment: 21,000; K-12 **Annual Users:** 7,000

Other Users: Six public high schools.

Illustrative Applications:
Drill and practice for grades 1-12 in MATHEMATICS, READING, LANGUAGE ARTS.
Computing literacy for junior high and high school students.
COMPUTER SCIENCE curriculum.
Computerized management system for grades 4-7 in MATHEMATICS.

Computer(s): UNIVAC 9030; HP 2000F; HP 2000 7A; CCC A16; 3 HP 9100; 3 HP 9810

Terminals: 44 interactive

Contact(s):
Vernon Johnson, Consultant
Instructional Computer Systems
P.O. Box 66100
Seattle, WA 98166

Jay Davis
CAI Manager
Cascade Junior High School
11212 Tenth Ave. SW
Seattle, WA 98146
(206) 433-2340 (Mr. Johnson)
(206) 433-2122 (Mr. Davis)

Sehome High School

Reasons for Nomination: Computer literacy of all students stressed; computer not limited to solely computer science; student club raised funds for terminal lease and microcomputer purchase.

Enrollment: 1,440; 9-12 **Annual Users:** 700

Illustrative Applications:
Drill and practice and tutorial in MATHEMATICS.
Tutorial in PHYSICS.
Computer concept courses (computer literacy and programming in BASIC).
Programming in PL/C and BASIC.
Individualized projects with PL/1, FORTRAN, RPG, COBOL, and PILOT.
Career information materials for counseling.

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Computer(s): Western Washington State College's IBM 360/40; IBM 7090; INTERDATA 7-32; SOL 20 microcomputer

Terminals: 4 interactive

Contact(s): Paul Sadler, Computer Science Teacher
Sehome High School
2700 College Park
Bellington, WA 98225
(206) 676-6481

McFarland Public Elementary Schools

Reasons for Nomination: CMI addresses classroom management needs of teachers; cooperation between University of Wisconsin and McFarland Public Schools in CMI project.

Enrollment: 700; K-6 **Annual Users:** 700

Illustrative Applications: Computer-managed instruction in READING (WDRSD), MATHEMATICS (DMP) and SCIENCE (SAPA).
Generating reports on progress and achievement of students, objective based.

Computer(s): Harris Datacraft; University of Wisconsin's UNIVAC 1110

Terminals: 2 interactive

Public Information: Extensive information available on CMI project.

Contact(s): Donald McIsaac, Professor
University of Wisconsin
Department of Educational Administration
1025 W. Johnson Street
Madison, WI 53706
(608) 263-2718

Milwaukee Public Schools

Reasons for Nomination: School system dedicated to use of computers in school (one senior high school specializes in using computer in all aspects of curriculum).

Enrollment: 110,000; K-12 **Annual Users:** 3,000; 7-12

Illustrative Applications: Computer literacy courses, programming and applications (BASIC, FORTRAN, PL/1) in COMPUTER SCIENCE.
Problem-solving, drill and practice in MATHEMATICS and ENGLISH.
Simulations in SCIENCE and SOCIAL STUDIES.

Computer(s): IBM 370/148; DEC PDP 11/45; DEC PDP 11/70

Terminals: 40 interactive, 2 graphic, 1 plotter

Public Information: Public information on computer system available

Contact(s): Richard Bergman, Director of Data Processing
Milwaukee Public Schools
5225 West Vliet Street
Milwaukee, WI 53208
(414) 475-8393

EXEMPLARY INSTITUTIONS IN ACADEMIC COMPUTING

January 1978

Educational institutions identified here are participating in the study, "Exemplary Institutions in Academic Computing." These institutions have been selected as Exemplars in one or more Categories of Excellence, on the basis of written responses to a series of questionnaires prepared by the Human Resources Research Organization. The project is sponsored by the National Science Foundation Education Directorate, and is directed by Dr. Robert Seidel and Beverly Hunter.

Individuals at the Exemplary institutions can share expertise with educators at other institutions who wish to improve or expand their uses of computers for learning and teaching. Individuals to contact regarding academic computing at the Exemplar institutions, may be found in the *Academic Computing Directory* published by HumRRO. More detailed information from the Exemplars will be published as Project final products.

CATEGORY 1: STUDENT ACCOMPLISHMENTS

Colleges and Universities With Student Enrollment Over 6,000 FTE

University of California, Irvine (CA)
University of Akron (OH)
University of Pittsburgh (PA)
University of Texas, Austin (TX)

Colleges and Universities With Student Enrollment Under 6,000 FTE

University of D.C., Van Ness
Grinnell College (IO)
Transylvania University (KY)
U.S. Naval Academy (MD)
Worcester Polytechnic Institute (MA)
Bennett College (NC)
Denison University (OH)
Evergreen State College (WA)

Community Colleges

Gavilan College (CA)
Golden West College (CA)
William Rainey Harper College (IL)
Burlington County College (NJ)

Elementary and Secondary Schools

George Washington HS (CO)
Ballou HS (DC)
Hull HS (MA)
Joyner Elementary School (NC)
Amherst Central Senior HS (NY)
Riverdale Country School (NY)
Belmont HS (OH)
North Salem HS (OR)
Sehome HS (WA)

Public School Districts

Huntington Beach USD (CA)
Los Nietos ESD (CA)
Montgomery County PS (MD)
School District of Kansas City (MO)
Syosset Central SD (NY)
Woodridge PS (OH)
Memphis City Schools (TN)
Dallas ISD (TX)
Richardson ISD (TX)
Jordan SD (UT)
Fairfax PS (VA)
Highline SD (WA)

Public Access

Capital Area Career Center (MI)

CATEGORY 2: INSTITUTION ACCOMPLISHMENTS

Colleges and Universities With Student Enrollment Over 6,000 FTE

New York Institute of Technology (NY)
University of Pittsburgh (PA)
University of Texas, Austin (TX)

Colleges and Universities With Student Enrollment Under 6,000 FTE

Trinity College (CT)
University of Tennessee, Chattanooga (TN)
Trinity University (TX)
Carnegie-Mellon (PA)

Community Colleges

Golden West College (CA)

Elementary and Secondary Schools

Ballou HS (DC)
Garden City HS (KS)
Lincoln HS (MN)

Public School Districts

Huntington Beach USD (CA)
Atlanta PS (GA)
Chicago PS (IL)
Albuquerque PS (NM)
Jamesville-DeWitt CSD (NY)

CATEGORY 3: SPECTRUM OF COMPUTER APPLICATIONS TO LEARNING AND TEACHING

Colleges and Universities with Student Enrollment Over 6,000 FTE

Auburn University (AL)
California State at Fresno (CA)
Stanford University (CA)
University of Colorado, Boulder (CO)
University of Delaware (DE)
Southern University and A&M College (LA)
Mankato State University (MN)
Rutgers University (NJ)
Ohio State University (OH)
University of Pittsburgh (PA)
University of Texas, Austin (TX)
University of Texas, El Paso (TX)
Western Washington University (WA)
University of Wisconsin, LaCrosse (WI)

Colleges and Universities With Student Enrollment Under 6,000 FTE

Colorado School of Mines (CO)
Fairfield University (CT)
Trinity College (CT)
Anderson College (IN)
Grinnell College (IO)
Emporia State University (KS)
U.S. Naval Academy (MD)
Carleton College (MN)
Northern Montana College (MT)
Worcester Polytechnic Institute (MA)
Dartmouth College (NH)
Hamilton/Kirkland College (NY)
Bennett College (NC)
University of North Carolina, Asheville (NC)
Denison University (OH)
Bucknell University (PA)
University of Tennessee, Chattanooga (TN)
University of Tennessee, Martin (TN)
Trinity University (TX)
Evergreen State College (WA)
University Wisconsin, Superior (WI)

Community Colleges

Golden West College (CA)
William Rainey Harper College (IL)
St. Louis CC, Florissant Valley (MO)
Broome County CC (NY)
Roane State CC (TN)

Elementary and Secondary Schools

George Washington HS (CO)
Garden City HS (KS)
Lincoln HS (MN)
Maple Lake HS (MN)
Ridgewood HS (NJ)
Teaneck HS (NJ)
Commack HS South (NY)
Jericho HS (NY)
Joyner Elementary School (NC)
West Cary Jr. HS (NC)
Belmont HS (OH)
Catlin Gabel School (OR)

Public School Districts

Huntington Beach USD (CA)
Palo Alto SD (CA)
San Francisco Unified SD (CA)
Chicago Public Schools (IL)
Wichita PS (KS)
Jamesville-DeWitt CSD (NY)
Dallas ISD (TX)

CATEGORY 4: COMPUTER LITERACY PROGRAMS FOR STUDENTS, FACULTY OR COMMUNITY

Colleges and Universities With Student Enrollment Over 6,000 FTE

Auburn University (AL)
University of California, San Diego (CA)
Mankato State University (MN)
Rutgers University (NJ)
University of Illinois, Urbana (IL)
New York Institute of Technology (NY)
University of Texas, Austin (TX)
University of Texas, El Paso (TX)
University of Wisconsin, LaCrosse (WI)

Colleges and Universities With Student Enrollment Under 6,000 FTE

Colorado School of Mines (CO)
Fairfield University (CT)
Grinnell College (IO)
U.S. Naval Academy (MD)
Carleton College (MN)
Northern Montana College (MT)
Dartmouth College (NH)
Bennett College (NC)
Denison University (OH)
Cameron University (OK)
Bucknell University (PA)
Moravian College (PA)
University of Tennessee, Chattanooga (TN)
Trinity University (TX)
Evergreen State College (WA)

Community Colleges

Gavilan College (CA)
Mercer County CC (NJ)

Elementary and Secondary Schools

George Washington HS (CO)
St. Patrick HS (IL)
Lincoln HS (MN)
Maple Lake HS (MN)
North Salem HS (OR)
Teaneck HS (NJ)
Amherst Central Senior HS (NY)
Riverdale Country School (NY)

Public School Districts

Huntington Beach USD (CA)
Palo Alto USD (CA)
San Jose USD (CA)
Alexis I. DuPont (DE)
Montgomery County PS (MD)
Albuquerque PS (NM)
N. Syracuse Central SD (NY)
Dallas ISD (TX)
Richardson ISD (TX)
Fairfax County PS (VA)
Highline SD (WA)

Public Access

Lawrence Hall of Science (CA)

CATEGORY 5: COMPUTER SCIENCE OR DATA PROCESSING CURRICULA

Colleges and Universities With Student Enrollment Over 6,000 FTE

California Polytechnic State University, San Luis Obispo (CA)
Mankato State University (MN)
Western Washington University (WA)
University of Colorado, Boulder (CO)
Rutgers University (NJ)
Ohio State University (OH)
University of Texas, Austin (TX)
University of Wisconsin, LaCrosse (WI)

Colleges and Universities With Student Enrollment Under 6,000 FTE

Anderson College (IN)
U.S. Naval Academy (MD)
Worcester Polytechnic Institute (MA)
University of North Carolina, Wilmington (NC)
State University of New York, Plattsburgh (NY)
Bucknell University (PA)
Carnegie-Mellon (PA)

Community Colleges

William Rainey Harper College (IL)
St. Louis Community College, Florissant Valley (MO)
Burlington County College (NJ)
Mercer County College (NJ)
Roane State Community College (TN)

Elementary and Secondary Schools

George Washington HS (CO)
Ballou HS (DC)
Hull HS (MA)
Belmont HS (OH)
N. Salem HS (OR)
Ridgewood HS (NJ)
Teaneck HS (NJ)
Amsterdam HS (NY)
Commack HS South (NY)
Riverdale Country School (NY)
Sehome HS (WA)

Public School Districts

Jefferson County PS (CO)
Alexis I. DuPont SD (DE)
Atlanta PS (GA)
Chicago PS (IL)
Albuquerque PS (NM)
Churchill Area SD (PA)
Dallas ISD (TX)
Fairfax County PS (VA)

CATEGORY 6: OUTREACH TO COMMUNITY AND OTHER INSTITUTIONS

Colleges and Universities With Student Enrollment Over 6,000 FTE

California State, Fresno (CA)
University of California, Irvine (CA)
University of Illinois, Urbana (IL)
Mankato State University (MN)
Jackson State University (MS)
University of North Dakota (ND)
University of Akron (OH)
Ohio State University (OH)
University of Pittsburgh (PA)
University of Texas, Austin (TX)
Western Washington University (WA)
University of Wisconsin, LaCrosse (WI)

Colleges and Universities With Student Enrollment Under 6,000 FTE

Fairfield University (CT)
Lewis University (IL)
Grinnell College (IO)
U.S. Naval Academy (MD)
Worcester Polytechnic Institute (MA)
Northern Montana College (MT)
Dartmouth College (NH)
University of North Carolina, Asheville (NC)
Denison University (OH)
Bucknell University (PA)
University of Tennessee, Chattanooga (TN)
Rice University (TX)
Evergreen State College (WA)

Community Colleges

Maricopa Community College District (AZ)
Gavilan College (CA)
Golden West College (CA)
Burlington County College (NJ)
Mercer County Community College (NJ)
Roane State Community College (TN)

Elementary and Secondary Schools

George Washington HS (CO)
Canterbury School (CT)
Ballou HS (DC)
St. Patrick HS (IL)
Hull HS (MA)
Ridgewood HS (NJ)
Riverdale Country School (NY)
Belmont HS (OH)
Catlin Gabel (OR)
Upper St. Clair HS (PA)
Sehome HS (WA)

Public School Districts

Huntington Beach USD (CA)
Los Nietos ESD (CA)
San Francisco Unified SD (CA)
Jefferson County PS (CO)
Alexis I. DuPont SD (DE)
School District of Kansas City (MO)
Wayne Township PSD (NJ)
Jamesville-DeWitt CSD (NY)
Churchill Area SD (PA)
Dallas ISD (TX)
Fairfax County PS (VA)

Public Access

Lawrence Hall of Science (CA)
Capital Area Career Center (MI)

CASE STUDIES IN ACADEMIC COMPUTING

The following educational institutions have been selected to participate as Case Studies in Academic Computing. These institutions have been selected on the basis of the following criteria:

(1) Institutional commitment to academic computing, as demonstrated by such things as the survival of instructional computing over several budget cycles; survival over the turnover of key personnel; existence of a job position for coordinator or director of instructional computing; reform of curriculum to incorporate computer uses; increases in appropriate computing equipment; incentives to faculty for instructional innovation.

(2) A high degree of computer literacy among students, faculty and administration, as reflected in student accomplishments, spectrum of applications, and number of computer users on campus.

(3) Usefulness of materials submitted in response to Project Questionnaires.

The persons to contact regarding academic computing at the Case Study institutions are identified in the *Academic Computing Directory* published by HumRRO.

North Salem High School, Salem, Oregon
George Washington High School, Denver, Colorado
Lincoln High School, Bloomington, Minnesota
Ridgewood High School, Ridgewood, New Jersey
Riverdale Country School, Bronx, New York
Huntington Beach Union High School District, Huntington Beach, California
Alexis I. DuPont School District, Greenville, Delaware
Chicago Public Schools, Chicago, Illinois
Dallas Independent School District, Dallas, Texas
Lawrence Hall of Science, Berkeley, California
William Rainey Harper Community College, Palatine, Illinois
Golden West Community College, Huntington Beach, California
United States Naval Academy, Annapolis, Maryland
Worcester Polytechnic Institute, Worcester, Massachusetts
Denison University, Granville, Ohio
Evergreen State College, Olympia, Washington
Jackson State University, Jackson, Mississippi
Mankato State University, Mankato, Minnesota
Rutgers, The State University, Piscataway, New Jersey
University of Delaware, Newark, Delaware
University of Texas, Austin, Texas